WASHINGTON NEWS

218

Details of Medical Care Program

SOCIAL SECURITY ACT CHANGES ANALYZED

The new law 'Social Security Amendments of 1960' has three sections of particular interest to physicians An analysis of them follows

Title IV

This title eliminates the age 50 requirement for eligibility for disability insurance benefits It also eliminates the six-month waiting period for disability benefits for an individual whose disability had been terminated and who again became disabled within a five-year period

Under existing law, disabled persons who return to work under a state-approved vocational rehabilitation plan continue to draw benefits for up to 12 months even though they are engaged in substantial gainful activity Individuals who rehabilitate themselves or who are rehabilitated under a program other than a state rehabilitation program do not have this benefit This title amends the law to provide that any disabled individual would be granted a nine-month (not necessarily consecutive) trial work period in which he could perform substantial services without losing his benefits If he were determined to be able to engage in substantial gainful activity, his benefits would be terminated three months later An individual whose condition improves, regardless of the trial work period, would receive benefits for three months after the determination of his ability to engage in substantial gainful activity

This title also liberalizes the coverage requirement for certain individuals disabled before 1955

Title VI

This title revises and amends Title I of the Social Security Act under which Old Age Assistance is provided, to authorize federal participation in approved state plans furnishing medical assistance on behalf of aged individuals who are recipients of Old Age Assistance and for individuals not on Old Age Assistance whose income and resources as determined by the state, are not sufficient to meet the costs of necessary medical services

While some of the requirements of the state plan for Old Age Assistance (which now includes medical care) and those for medical assistance for the aged not under OAA would be identical, the bill also establishes specific requirements for each program Requirements which would apply to both programs would require a state plan to provide

1 That it will be in effect in all political subdivisions of the state
2 For financial participation by the state
3 That it will be administered by a single state agency
4 A fair hearing for an individual whose claim for benefits is denied
5 Such methods of administration, including a merit system for personnel, as are found necessary by the Secretary for proper and efficient operation (except that the Secretary would have no authority with respect to the selection, tenure of office and compensation of any individual employed under standards established by the state)
6 For making reports as required by the Secretary of Health, Education and Welfare
7 For nondisclosure of information regarding applicants and recipients
8 An opportunity for an individual to apply for assistance which would be furnished with reasonable promptness to those eligible
9 If the plan includes payments to individuals in private or public institutions, for the designation of a state authority which would be responsible for establishing and maintaining standards for such institutions

State plans for Old Age Assistance programs would have to provide

1 That the state agency, in determining eligibility, would take into consideration any other income or resources of the individual
2 Reasonable standards for determining eligibility for and the extent of such assistance
3 A description of services to be provided, including the utilization of other agencies providing similar services

Old Age Assistance" means money payments to, or medical care in behalf of or any type of remedial care recognized under state law in behalf of needy individuals who are 65 years of age or older, but does not include—(1) any payments to or care in behalf of any individual who is an inmate of a public institution (except as a patient in a medical institution) or any individual who is a patient in an institution for tuberculosis or mental diseases, or (2) payments to an individual diagnosed as having tuberculosis or psychosis and who is a patient in a medical institution or (3) any care in behalf of an individual who is a patient in a medical institution for tuberculosis or psychosis for a period exceeding 42 days

If the state plan includes medical assistance for the aged not under Old Age Assistance, it would

have to provide

1 For the inclusion of "some" institutional and "some" noninstitutional care and services
2 That no fee or charge will be imposed as a condition of eligibility
3 For the furnishing of assistance to residents of the state who are temporarily absent therefrom
4 Reasonable standards for determining eligibility for and the extent of such assistance
5 That no lien will be imposed on the property of the individual prior to his death and that there will be no recovery until after the death of such individual and his surviving spouse, if any, for any medical assistance correctly paid on behalf of such individual

"Medical assistance for the aged" would mean "payment of part or all of the cost of the following care and services for individuals 65 years of age or older who are not recipients of Old Age Assistance, but whose incomes and resources are insufficient to meet all of such costs—

1 Inpatient hospital services,
2 Skilled nursing home services,
3 Physicians' services,
4 Outpatient or clinic services,
5 Home care services,
6 Private duty nursing services,
7 Physical therapy and related services,
8 Dental services,
9 Laboratory and x-ray services,
10 Prescribed drugs, eyeglasses, dentures and prosthetic devices,
11 Diagnostic screening and preventive services, and
12 Any other medical care or remedial care recognized under state law"

The bill carries no definition or limitations on the above service

The term would not include care or services to any individual who is an inmate of a public institution (except a medical institution) or any individual who is a patient in a tuberculosis or mental hospital However, care could be provided for the first 42 days for a patient in a medical institution for tuberculosis or psychosis

The Secretary would be required to approve any plans which meet the above requirements However, he could not approve any plan which imposes an age requirement of more than 65, a residence requirement which excludes any resident of the state who has resided therein five of the nine years immediately preceding his application or, in the case of applicants for medical assistance for the aged not under OAA, which excludes any individual who resides in the state, or any citizenship requirement which excludes a citizen of the United States

Both programs would have to be administered by the same agency However, if, for example, the program were being administered by the state department of public welfare, it could subcontract with the department of health to carry out the medical programs

As under the existing OAA program, the Federal Government would contribute four-fifths of the first $30 ($24) of the average monthly payment per recipient, plus a "federal percentage" (50-65%, depending on the state's relative per capita income) up to a maximum of $65 ($17 50-$22 75) per recipient

In addition, for OAA programs the bill generally provides an increase in the federal contribution of 50-80%, depending on the state's relative per capita income, of sums expended in medical vendor payments up to a maximum of $12

As under existing law, in computing the amount of monthly benefits paid by the state, expenditures for health insurance premiums would be included,

For those states which provide a program of medical assistance for the aged not under OAA, the Federal Government would contribute 50-80% of the cost of providing care, including expenditures for insurance premiums for medical or other type of remedial care

Under both programs, the Federal Government would contribute one-half the administration cost

These programs become effective Oct 1, 1960

Title VII

This title provides miscellaneous amendments to the Social Security Act, including authority for the Secretary of HEW to develop and revise guides and standards as to the level, content, and quality of medical care and medical services for use by the states in evaluating and improving their public assistance medical care programs and their programs of medical services for the aged The states would be required to submit reports to the Secretary relative to the medical care provided under their programs

This title would also authorize increases in appropriations for (1) maternal and child health services from $21 5 to $25 million, (2) crippled children's services from $20 to $25 million, and (3) child welfare services from $17 to $25 million Minimum allotments to each state under the programs for maternal and child health services and crippled children's services would be increased from $60,000 to $70,000 annually It would also authorize up to 12 5% of the appropriation for maternal and child health and for crippled children to be used as grants to state health agencies and to public or nonprofit institutions of higher learning in a state for special projects which may contribute to the advancement of maternal and child health and crippled children

The title also liberalizes the income provision (from $50 to $85 a month) under state plans for Aid to the Blind

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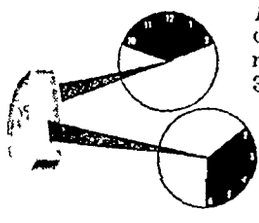

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MEDICAL NEWS

ARIZONA

Meeting of Physicians in Scottsdale —The American College of Physicians will hold a regional meeting for Arizona at Hotel Valley Ho, Scottsdale, Saturday, Oct 8 The program includes the following papers

- Pericardial Biopsy, Dr John F Curnn, Flagstaff
- Diabetes Mellitus with Associated Adrenal Insufficiency, Dr D W Markle, Prescott
- Tuberculosis in Pima County in 1959, Dr William G Ure, F A C P, Tucson
- Retrograde Arterial Catheterization Studies, Dr Hugh B Hull Jr Phoenix
- Quinidine Intoxication, Dr William A Butcher, Tucson
- The Pathogenesis and Management of Hyperkalemia, Dr Robert C Beers, Phoenix
- Pulmonary Embolı of Bone Marrow, Dr Lorel A Stapeley Jr, Phoenix
- Ophthalmodynamometry, Dr Robert Lorenzen, Phoenix
- Hypercholesterolemia, An Evaluation of Its Clinical Significance and Treatment, Dr Earl Estes, Phoenix
- Pulmonary Vascular Patterns in Emphysema, Dr Marcy L Sussman, Phoenix
- Small Bowell Biopsy, Dr Robert Sommerville Phoenix

Dr Edward C Klein Jr, regent of the college, will present an address at the noon luncheon, after which the Arizona Society of Internists will meet Dr W R Hewitt is governor of the college foı Arizona

CALIFORNIA

General Practice Meeting in San Francisco —The 1960 scientific assembly of the California Academy of General Practice will be held in San Francisco, Oct 16 19 All sessions will be held at the Masonic Memorial Temple on Nob Hill Out-of-state lecturers will include Dı George Crile Jr, department of surgery, Cleveland Clinic, Dr Robert B Greenblatt, professoı of endocrinology, Medical College of Georgia, Dr Ben W Lichtenstein, professor of neurology, University of Illinois College of Medicine, Dr Alan R Moritz, director, institute of pathology, Western Reserve University School of Medicine, Dı Edward H Rynearson, chief, department of medicine, Mayo Clinic, Dr John G Young, clinical professor of pediatrics, Southwestern Medical School of University of Texas Dr Leon O Desimone, Los Angeles, current president of the academy, will open the meeting Dr Clarence T Halburg, Redlands, president-elect, will take over as president at the final session Dr Herbert A Holden, San Leandro, is program chairman for the event For information, write California Academy of General Practice, 461 Market St, San Francisco 5

DISTRICT OF COLUMBIA

Dr Favour Named Chairman of Preventive Medicine —Dr Cutting B Favour has been appointed professor and chairman in preventive medicine and associate professor in medicine at Georgetown University School of Medicine Dr Favour comes to Georgetown from the Palo Alto (Calif) Medical Research Foundation, where he has been director of the department of immunology Since 1943 he has held teaching positions and hospital staff appointments at Harvard, Rockefeller Institute, and as a member of the faculty of Stanford University School of Medicine He is a fellow of the American College of Physicians

Personal —Paul C Tompkins, Ph D, has been appointed as chief of the Research Branch, Division of Radiological Health, U S Public Health Service Dr Tompkins comes to the Public Health Service from the U S Naval Radiological Defense Laboratory, San Francisco, where for the past 11 years he was scientific director —The promotions of Walter C Hess, Ph D, to associate dean of the Georgetown University Medical Center Schools of Medicine and Dentistry and of Dr Bruce I Shnider to assistant dean of the School of Medicine were announced Sept 10 by the Very Rev Edward B Bunn, S J, president of the university

ILLINOIS

Public Seminars on Mental Hygiene —"Mental Hygiene—A Challenge to You and the Community" is the theme of three public seminars to be presented in 1960-1961 by the North Shore Hospital, 225 Sheridan Rd, Winnetka The initial seminar will be Oct 12, 8 P M at the hospital Co-host will be the Winnetka Congregational Church, Reverend Robert F Truesdell, pastor Dr Benjamin Boshes, chairman, department of neurology and psychiatry, Northwestern University Medical School, will discuss the first topic Challenge of Mature Family Relations, Mental Hygiene at Home' Seminar 2, on Mental Hygiene of the Adolescent,' will be discussed by Dr Jules H Masserman, of Northwestern University, on Wednesday, Jan 11, and will be co-hosted by the Christ Episcopal Church of Winnetka, Reverend William Broughton, pastor Seminar 3, on Mental Hygiene at Work, May 10, 1961, will feature Dr John A Turner, Menninger Foundation, Topeka, Kan Co-host will be Winnetka s Presbyterian Church, Reverend Lloyd J Ogilvie, pastor The public is invited to attend all seminars There will be opportunities for questions and discussion For information, contact Mr Mel Mawrence, at MUseum 4-1414, Ext 56

Chicago

Conference on Medical Education —The 11th annual Conference on Pre-Medical and Medical Edu-

cation of the University of Illinois College of Medicine will be held Oct 21 in the Chicago Illini Union, 715 S Wood St The theme will be "A Look at the Pre-Medical Curriculum" More than 50 colleges and universities from central United States will be represented These are the institutions from which the College of Medicine draws most of its students Dr Granville A Bennett, dean of the University of Illinois College of Medicine, will deliver the welcome address, and Dr Nicholas J Cotsonas Jr, associate professor of medicine, will moderate a panel The principal speaker will be Anna E Severinghaus, Ph D, associate dean, Columbia University College of Physicians and Surgeons, New York City Dr Adrian M Ostfeld, assistant professor of preventive medicine, U of I College of Medicine, is chairman of the planning committee

KANSAS

Dr Delp Named Department Chairman—Dr Mahlon H Delp has been appointed chairman of the department of medicine at the University of Kansas School of Medicine and Medical Center in Kansas City A member of the faculty since 1938, following his graduation, internship, and residency at the Kansas school, Dr Delp since 1952 has been in charge of the school's postgraduate medical education department which enrolled over 6,300 in its courses during the year ending June 30, 1960 He is a diplomate of the American Board of Internal Medicine and a fellow of the American College of Physicians

Hospital News—Dr George Zubowicz, Topeka, Osawatomie State Hospital superintendent, announced the appointment of Dr J Luis Ibarra and Dr Luis A Toro as section chiefs for two of the hospital's six neuropsychiatric sections Both psychiatrists received their medical training at the University of Mexico and are now citizens of the United States Dr Ibarra, a recent graduate of the Menninger psychiatric program, is from Guadalajara, Mexico Dr Toro, from Mayaguez, Puerto Rico, recently completed his psychiatric residency at the Cleveland Psychiatric Institute, Cleveland

MARYLAND

Medical History Meeting Held—The first meeting for 1960-1961 of the Johns Hopkins Medical History Club was held at the Johns Hopkins Hospital, Baltimore, Monday, Sept 19 "William Osler's Religion" was presented by Dr Palmer H Futcher, and "Walter S Sutton and the Physical Basis of Mendelism," by Dr Victor A McKusick

MICHIGAN

Plans for Hearing Research Institute—A plan to construct a medical laboratory devoted exclusively to research on hearing has been announced by the University of Michigan Medical Center, Ann Arbor The $1,750,000 facility will be started with an initial grant of $200,000 from the Kresge Foundation of Detroit To be known as the Kresge Hearing Research Institute, it is expected to be completed in the academic year 1962-1963 Present plans call for a five-story wing to be added to the existing Kresge Medical Research Building in the heart of the University of Michigan Medical Center It will be connected with the 1,050-bed University Hospital and adjacent to the Medical School and School of Nursing Special equipment, such as anechoic (echo-free) and reverberation chambers, vibrationless platforms, an electronics laboratory, and shielded rooms, will be included in the building In addition, there will be tape-recording facilities, a glassworking shop and a number of patient-testing and examining rooms Although extensive work will be done with patients, the institute will be designed chiefly to advance knowledge of hearing through a broad, multidisciplinary attack on scientific problems At least seven departments of the University of Michigan Medical School intend to expand their research activities into hearing problems once the institute is established A director has not yet been named for the Kresge Hearing Research Institute, but an appointment is expected to be made by the board of regents early this fall

NEW JERSEY

Diabetes Meeting in Lyons—The New Jersey Diabetes Association in cooperation with the New Jersey State Department of Health will present the eighth annual Symposium on Diabetes Research Methodology and Application, Oct 26, 2-5 p m, at the Veterans Administration Hospital, Lyons Three papers are scheduled

- Research Techniques in the Detection of Latent Diabetes, Dr Alexander Marble, Boston
- Concepts and Methodology Related to Mechanism of Action of Insulin, Dr Yale J Topper, Bethesda, Md
- Some Recent Studies in Lipid Metabolism and Nutrition, Albert F Debons, Ph D, New York City

The papers will be followed by a panel discussion, "Diabetes Research," moderated by Dr Francis D W Lukens, director, George S Cox Medical Research Institute, University of Pennsylvania, Philadelphia Members of the American Academy of General Practice will receive three hours credit under Category II for attendance at the symposium For information, write Dr Arthur Krosnick, Coordinator, Diabetes Control Program, State of New Jersey Department of Health, Trenton 25

Annual Alumni Banquet—The Alumni Association of the Jersey City Medical Center will hold its 13th annual alumni banquet on Nov 19, at the Hotel Plaza, Jersey City For information write Dr

Samuel A Cohen, President, Alumni Association of the Jersey City Medical Center, 980 Summit Ave, Jersey City 7, N J

NEW YORK

Symposium on Diabetes —The eighth all-day symposium of the Clinical Society of the New York Diabetes Association will be held Friday, Nov 11, at the Hotel New Yorker, New York City Dr Sidney Gellis, of Boston University School of Medicine, will present a special lecture at the morning session, titled The Infant of the Diabetic Mother" Other papers include the following

- Inborn Errors of Carbohydrate Metabolism, Dr David Yi-Young Hsia Evanston, Ill
- Heredity in Diabetes Mellitus, Dr Arthur A Steinberg, Cleveland
- Spontaneous Diabetes in Animals, Dr George Lerganian, Boston
- The Rapid Intravenous Glucose Tolerance Test in Pregnancy, Drs Felix A Silverstone, Edward Solomons, and Jeanette Rubricine, Brooklyn
- Modification and Calibration of the Cortisone Glucose Tolerance Test in Human Volunteers, Dr Christian R Klimt, Minneapolis
- Drug Responsive Tests Dr Roger Unger, Dallas
- Hormonal Influenced Tests, Dr Kelly M West, Oklahoma City

The afternoon session will conclude with a panel discussion Physicians, medical students, and professional personnel interested in diabetes are invited Advance registration is required There is no registration fee For information and registration, write the New York Diabetes Association, 104 E 40th St, New York 16 Dr Kermit L Pines is secretary of the association

PENNSYLVANIA

Faculty Promotions —Three faculty members of the University of Pittsburgh Graduate School of Public Health have been promoted to the rank of full professor Ronald Bentley, Ph D, to professor of biochemistry and nutrition, C C Li, Ph D, to professor of biometry, and Isidore Altman Ph D, to professor of medical care statistics Dr Bentley served as research associate at Columbia College of Physicians and Surgeons, New York City, before coming to Pittsburgh in 1953 Dr Li came to Pittsburgh in 1951 from the National Peking University, China, where he was professor and head of the department of agronomy Before joining the faculty of the Graduate School of Public Health in 1955, Dr Altman was statistical consultant for the United Cerebral Palsy Association

Philadelphia

Symposium on Geriatric Management —Specialists and medical administrators from nine states will be among the speakers and panelists at a one-day symposium on geriatric management to be held at the Sheraton Hotel, Philadelphia Sunday Oct 16 Joint sponsors of the program, made possible by a grant from and with the cooperation of Lederle Laboratories, will be the Philadelphia County Medical Society and the city's five medical colleges University of Pennsylvania, Jefferson, Hahnemann Temple University, and Woman's Medical College Speakers will include Albert I Lansing, Ph D, Pittsburgh, Dr Burgess L Gordon, Chicago Dr Leo H Criep, Pittsburgh, Dr J Arthur Myers, Minneapolis, Dr Henry J Tumen, Philadelphia Dr H Marvin Pollard, Ann Arbor, Mich, Dr Joseph B Kirsner, Chicago, N W Shock, Ph D, Baltimore, Dr Albert N Brest, Philadelphia Dr George R Hermann, Galveston, Dr Oscar Creech Jr New Orleans, Dr Charles A Doan, Columbus Ohio, Dr Frederic D Deman, New York City, and Dr Michael M Dacso, New York City Miss Bertha Sheppard Adkins, LL D, Under Secretary of Health, Education and Welfare, will address the symposium luncheon Question-and-answer periods will follow both sessions, and the program will conclude with a reception for physicians and their wives

University News —The officers of the staff of Woman's Medical College of Pennsylvania elected for a two-year term, are president, Dr Mary R Curcio, clinical professor of medicine, vice-president, Dr James G Bassett, associate professor of surgery, representative to administrative and medical boards, Dr Rita E Scott, clinical assistant professor of pediatrics The elections were held June 29 at Woman's Medical College

TENNESSEE

Personal —Roland Herrick Alden, Ph D, professor and chief, division of anatomy, the University of Tennessee Medical Units, Memphis, has been appointed to serve a four-year term on the Anatomical Sciences Training Committee of the National Institutes of Health, U S Public Health Service As a member of the committee, Dr Alden will review applications for training grants in the field of anatomical sciences The program supports research training at a national level for postdoctoral and predoctoral trainees in electron microscopy, histo-, cyto- and microchemistry, neurophysiology, cell biology, neuroanatomy, comparative anatomy, and other related science fields

Dermatology Meeting in Chicago —The 19th annual meeting of the American Academy of Dermatology and Syphilology will be held Dec 3-8 at the Palmer House, Chicago under the presidency of Dr Francis W Lynch Special courses in histopathology, radiation therapy, fundamentals of cutaneous allergy, structure and function of the skin, cutaneous surgery, and application of research methods to dermatology are scheduled for Dec 3-4 A residents' forum is planned for the morning of

Dec 5, and that afternoon informal discussion groups will follow the two panel discussions and symposium The James R Webster Memorial Lecture, "Five Years with Operation Deep Freeze," will be presented at 8 30 P M, Dec 6, by Capt Earland E Hedblom, M C, U S Navy, Washington, D C The program includes the following symposiums

- Internal Medicine in Relation to Dermatology
- Cutaneous Tumors
- Industrial Dermatoses
- Syphilis and Venereal Diseases
- Psychosomatic Aspects of Dermatology
- Diagnosis and Treatment of Fungus Infections
- Environmental Dermatoses
- Common Dermatoses
- Pharmaceutical Therapeutics
- Miscellaneous Dermatoses

Scientific and technical exhibits are planned The annual banquet will be held on Wednesday evening, Dec 7, 7 30 P M For information, write the American Academy of Dermatology and Syphilology, First National Bank Bldg, Rochester, Minn

TEXAS

Building Program for Medical Center —A $1,400,000 grant of Hill-Burton Act funds toward the building and renovation program of the Medical Branch of the University of Texas, approved recently by the Texas State Department of Health, was hailed by Medical Branch officials as a major boost to an over-all $10,000,000 modernization plan underway Galveston The grant assures construction, start- next year, of a new out-patient department ding, to be followed by the construction of a new basic science building Both will be six-story structures Matching funds of $1,600,000 from the Sealy and Smith Foundation plus a $50,000 grant from the Babe Didrickson Zaharias Fund assure completion of the second phase of the improvement program, and launching of the third phase This development follows renovation work recently completed or underway on the Randall Pavilion, the old Out-Patient Building and the State Psychopathic Hospital, plus miscellaneous remodeling costing $1,700,000 Also currently underway are major air-conditioning and remodeling programs totaling an additional $1,150,000 A side-effect of the expansion will be the creation of an estimated 100 additional hospital beds by freeing space now used for laboratory, diagnostic, teaching, and hospital sciences

Personal.—The China Medical Board of New York, Inc, announced the appointment of Frank H Connell, Ph D, as assistant director effective July 1 Since 1955 Dr Connell has been head of laboratory services and parasitologist, M. D Anderson Hospital, professor of parasitology, University of Texas Postgraduate School of Medicine, and clinical professor of parasitology, Baylor University College of Medicine, Houston —Dr Arnold M Weissler was appointed assistant director of the cardiovascular research laboratory and assistant professor of internal medicine at the University of Texas Medical Branch at Galveston Dr Weissler was chief of the Cardiovascular-Renal Section of Durham Veterans' Administration Hospital, Durham, N C, before joining the staff of the University Medical Branch

WASHINGTON

Executive Officers Named for Two Departments — The recent appointment of two physicians as executive officers of departments at the University of Washington School of Medicine, Seattle, has been announced by Dean George N Aagaard The training program for anesthesiology was recently given departmental status by the board of regents The department's first executive officer is Dr John J Bonica, of Tacoma Dr Bonica has been director of anesthesiology at Tacoma General Hospital and Pierce County Hospital for 13 years He has lectured on anesthesiology in every country of North and South America and Europe in recent years Dr J Thomas Grayston, Chicago, has been appointed professor of public health and preventive medicine and executive officer of the department Dr Grayston has headed a U S Navy medical research unit in Taipei, Formosa, for the past three years During that period he was on leave from a position as assistant professor of preventive medicine at the University of Chicago School of Medicine Both men started their duties at the School of Medicine Sept 1

WEST VIRGINIA

State Medical Election —The West Virginia State Medical Association elected the following officers for the year 1960-1961 president, Dr John W Hash, Charleston, president-elect, Dr Delmas E Greeneltch, Wheeling, vice-president, Dr Lawrence J Pace, Princeton, and treasurer, Dr Daniel N Barber, Charleston

WISCONSIN

Faculty Grant Announced —Michael Laskowski Sr, Ph D, professor of biochemistry, Marquette University School of Medicine, Milwaukee, has been awarded a $111,000 faculty-level grant by the American Cancer Society The grant, which enables the university to create a position for the academic lifetime of an investigator, is the 13th one made by the American Cancer Society to "investigators of extraordinary promise in the field of medical, biological, and related physical sciences" Dr Laskowski will be known as the Grace M Schwarten American Cancer Society Professor of Biochemistry Born in Smolensk, Dr Laskowski received his Ph D from the University of Warsaw in 1929 He was a fellow of the Polish Culture Foundation and a fellow of

the Rockefeller Foundation at the University of Basel Medical School, Switzerland

GENERAL

Memberships Invited for Diagnostic Radiology Group—Applications for Charter Membership in the American Society of Diagnostic Radiology are being received Membership is open to general practitioners and internists who do or may desire to do some types of diagnostic radiology in their offices For information, write Dr Louis Shattuck Baer, 411 Primrose Rd, Burlingame, Calif

Effect of Hypertension on Mortality Ratios—Mortality is higher among people whose blood pressure is above average than among those whose blood pressure is average or lower, according to statisticians of the Metropolitan Life Insurance Company These findings are based on data from the Build and Blood Pressure Study, 1959, published by the Society of Actuaries The excess mortality is attributable largely to the cardiovascular-renal diseases

Rhinology Meeting in Chicago—The sixth annual meeting of the American Rhinologic Society will be held at the Belmont Hotel, Chicago, on Oct 8 In the morning session two symposiums are scheduled on 'Nasal Pressure Tests' and "Choanal Atresia" At the afternoon session six papers will be presented The guest speaker at the dinner will be Dr Morris Fishbein, Chicago, whose subject will be "Fifty Years of Medical Progress" For information, write Mrs F Nizenkoff, American Rhinologic Society, 530 Hawthorne Place, Chicago 13

American Board of Nutrition Examinations—The American Board of Nutrition will hold the next examinations for certification as a specialist in human nutrition on April 10, 1961, in Atlantic City Candidates who wish to be considered for these examinations should forward applications to the secretary's office not later than March 1 Application forms may be obtained from the Secretary, Dr Robert E Shank, Department of Preventive Medicine, Washington University School of Medicine, Euclid and Kingshighway, St Louis

Optical Society Meeting in Boston—The 45th annual meeting of the Optical Society of America will be held at the Hotel Somerset, Boston, Oct 12-14 The program will include several invited speakers from overseas Richard Tousey, Ph D, Washington, D C, recipient of the Ives Medal for 1960, will give an address on the morning of Oct 14 The after-dinner speaker at the banquet will be Prof Harold E Edgerton, D Sc, Cambridge, Mass, who will speak on undersea photography For information, write O S A Executive Office 1155 16th St N W, Washington 6, D C

Ophthalmology and Otolaryngology Meeting—The American Academy of Ophthalmology and Otolaryngology will hold its 65th annual meeting in Chicago at the Palmer House, Oct 9 to 14 Eye, ear, nose, and throat physicians from all over the United States, with many coming from other countries, will meet to hear scientific papers, view exhibits and motion pictures, and participate in instructional courses Dr Dean M Lierle, of Iowa City, president of the academy, will preside over the meeting Dr William L Benedict, of 15 Second St, S W, Rochester, Minn, is Executive Secretary-Treasurer

Prevalence of Poliomyelitis—According to the National Office of Vital Statistics, the following number of reported cases of poliomyelitis occurred in the United States, its territories and possessions in the weeks ended as indicated

Area	Sept 17 1960 Paralytic Type	Sept 17 1960 Total Cases	Sept 19 1959 Total
New England States			
Maine	2	2	7
New Hampshire			
Vermont		2	
Massachusetts	1	1	15
Rhode Island	1	2	1
Connecticut	4	7	2
Middle Atlantic States			
New York	12	21	42
New Jersey	7	7	8
Pennsylvania	5	9	12
East North Central States			
Ohio	3	5	10
Indiana	7	11	6
Illinois	6	8	20
Michigan	1	10	9
Wisconsin		3	1
West North Central States			
Minnesota	1	4	22
Iowa			9
Missouri	3	5	30
North Dakota		2	4
South Dakota		1	
Nebraska		1	5
Kansas		4	11
South Atlantic States			
Delaware			2
Maryland	9	11	4
District of Columbia			1
Virginia	4	4	17
West Virginia	1	2	25
North Carolina	4	5	18
South Carolina	2	6	9
Georgia	2	2	6
Florida	2	2	10
East South Central States			
Kentucky			4
Tennessee	1	2	20
Alabama			10
Mississippi	1	1	[illegible]
West South Central States			
Arkansas	1	1	10
Louisiana			5
Oklahoma			2
Texas	4	6	10
Mountain States			
Montana			
Idaho			
Wyoming		2	
Colorado	2	2	3
New Mexico	1	1	1
Arizona			4
Utah			2
Nevada			
Pacific States			
Washington	2	2	41
Oregon	1	1	7
California	19	21	39
Alaska			
Hawaii			
Territories and Possessions			
Puerto Rico	5	9	
Total	121	183	518

Home Designed for Disabled—A model home designed specifically for the physically disabled the elderly and persons with cardiac handicaps and

built on the grounds of the Institute of Physical Medicine and Rehabilitation, New York University Medical Center, New York City, was officially opened Aug 26 The house, called the "Functional Home for Easier Living," was contributed to the Medical Center by a builder of St Petersburg, Fla Consisting of a living room, two bedrooms (one a nursery), kitchen, dining area, bathroom, and carport, the home cost $13,500 in St Petersburg, and it is estimated that it will cost $17,000 in the New York City area

Safety Congress and Exposition in Chicago—On Oct 17-21, the 1960 National Safety Congress and Exposition will be held in Chicago Safety films, winners of the 1960 awards of the National Committee on Films for Safety, will be shown and special meetings are scheduled to be held on various areas of safety, including the following accidents, prevention fundamentals, public safety, good practice in industrial gas installation and use, new fire extinguishing agents, safe material handling, farm safety, and artificial respiration The registration fee is $7 Entertainment includes the congress party, Thursday evening, Oct 20, at the Conrad Hilton Hotel For information, write the National Safety Council, 425 N Michigan Ave, Chicago 11

lastic Surgery Group Meets—The American Society of Facial Plastic Surgery will hold its fall meeting Thursday, Oct 13, at the Palmer House, Chicago The scientific session will begin at 8 30 P M to consider "Problems in Rhinoplasty and Otoplasty" Dr Irving B Goldman, New York City, will moderate the program which will include the following panelists Dr Jack R Anderson, New Orleans, Dr Oscar J Becker, Chicago, Dr Sidney S Feuerstein, New York City, Dr Irvin J Fine, Perth Amboy, N J, Dr Jesse Fuchs, Beverly Hills, Calif, and Dr Trent W Smith, Columbus, Ohio Dr Sam H Sanders, Memphis, Tenn, is president of the society For information, write Mrs Joseph H Globus, 960 Park Ave, New York 28, executive secretary

Symposium on Medical Aspects of Space Energies—On Oct 24-26 an unclassified symposium, "Medical and Biological Aspects of the Energies of Space," will be presented by the School of Aviation Medicine, USAF Aerospace Medical Center, Brooks Air Force Base, Texas, at the Granada Hotel, San Antonio, Texas The three segments of the symposium are to cover the following 1 Delineation of the energies of space important from a biological standpoint, 2 Application of the energies for biological purposes, and 3 Biological protection against the hazards of the energies of space A total of 25 papers are scheduled on the program Arrangements for the symposium are being made by the Southwest Research Institute, 8500 Culebra Road, San Antonio 6, Texas

Seminar on Pancreatic Function—An Applied Seminar on Measurements of Pancreatic Function in Clinical Medicine will be presented under the auspices of the Association of Clinical Scientists at the Washington Hospital Center, Washington, D C, Nov 4-5 Under the direction of Dr F William Sunderman of the Jefferson Medical College, the fundamental biochemistry, principles of methodology, and interpretations in clinical medicine will be presented The applied seminar is designed to be of practical usefulness to clinicians, pathologists, and workers in clinical laboratories Hans T Clarke, D Sc, of the department of biochemistry, Yale University, New Haven, Conn, will give the banquet address, "Antibiotics, A Chemical Challenge" Those interested in attending this seminar may write to Dr F William Sunderman, 1025 Walnut St, Philadelphia 7

Drug Manufacturers Aid Project Hope—Fifty-two of the nation's prescription drug manufacturers have contributed in excess of $780,000 in products and cash to Project HOPE, according to Dr William B Walsh, Washington, D C, president of the People-to-People Health Foundation, sponsor of the project Over $100,000 of the companies' contributions were in cash Product values were computed according to manufacturers' wholesale prices The donations, coordinated by the Pharmaceutical Manufacturers Association, came from PMA member companies A part of President Eisenhower's People-to-People program, Project HOPE sent a 15,000 ton hospital ship, the "SS HOPE I," to Southeast Asia on Sept 22 Staffed with American doctors, nurses, and medical technicians, the floating medical center will bring modern medical knowledge and techniques to the medical and health professions of newly developing countries throughout the world

Program to Aid Education—Contributions amounting to more than $800,000 have been awarded to about 100 American colleges and universities under the Eastman Kodak Company's annual aid-to-education program, the company announced Sept 20 The campany's program this year calls for 65 direct grants, 44 fellowships for advanced study in science, engineering, and business, and a variety of special contributions During the past five years, Kodak's total expenditures under its aid-to-education program have amounted to about 3 5 million dollars The direct grants for 1960, totaling about $290,000, were given to privately supported colleges and universities, which may use the funds in any way they wish The fellowships, which are for the 1961-1962 academic year, are valued at more than $150,000 The students to receive them will be chosen by the

colleges to whom the fellowships have been awarded A total of 31 of the fellowships will go to persons studying for the Ph D degree

Report on American Medicine —The October, 1960, issue of *Harper's Magazine* will contain a special supplement examining various aspects of American Medicine Subjects covered in this eight article report include medical care costs, government versus private medicine, the doctor-patient relationship, medical research, current and future hospital problems, and the role of the family physician Physician-readers may well find that they disagree with conclusions reached by *Harper's* editors and writers, particularly those set forth in the lead article, 'The Politics of Medicine," by Edward T Chase These articles should, however, be of interest to all those concerned with medicine's public image The editors of *Harper's* close their foreword to the section with this statement "We hope, however, that the following articles will offer a basis for informed debate on [these] questions' The A M A concurs and Washington, D C, area residents can watch a public airing of differences of opinions and philosophies as spokesmen for American Medicine and *Harper's* meet on the Georgetown Forum of the Air this month

International Meeting of Neurological Surgeons in Washington, D C —The World Federation of Neurosurgical Societies will sponsor the second International Congress of Neurological Surgery, to be held at the Statler Hilton Hotel, Washington, D C Oct 14-20, 1961 The preliminary program includes four symposiums

- Radioactivity and Heavy Radiation Particles in Neurosurgery
- Space Occupying Intracranial Lesions
- Re evaluation of Surgery in the Treatment of Pain
- A Biology of the Nervous System, B Hydrocephalus

Individual society meetings are planned before and after the congress, including a symposium on stereotaxic surgery to be presented at the Temple University Medical Center, Philadelphia, Oct 11 The final day to make application to present a paper or a motion picture at the congress will be March 1, 1961, the final day for applying to show an exhibit is Jan 1, 1961 Address all communications to the Secretary-General, Dr Bronson S Ray, 525 E 68th St, New York 21

Pathologists Meetings Held in Chicago —The week of Sept 25 the annual meetings of the College of American Pathologists and the American Society of Clinical Pathologists were held jointly in Chicago On the agenda were 48 reports on research, 71 technical and 27 scientific exhibits, 33 workshop courses in complex laboratory procedures, and an all day seminar that is an annual event at these meetings and this year was devoted to diseases of the lower face including the salivary glands Holding joint sessions at the pathology meetings was the Inter-Society Cytology Council A joint symposium Sept 24 presented a morning panel on cytology of the female genital tract, including the Papanicolaou test, and 10 lectures on cell changes in nonmalignant diseases of the colon, intestines, respiratory tract, and other organs Pathologists from 11 west European countries, South Africa, Israel, Egypt, India, and other foreign lands attended Dr Frank C Coleman, Des Moines, Iowa, president of the College of American Pathologists, and Dr John J Clemmer, Albany, New York, president of the American Society of Clinical Pathologists presided at the meetings of their societies

Psychosomatic Medicine Meeting in Philadelphia — The seventh annual meeting of the Academy of Psychosomatic Medicine will be held Oct 13-15 at the Benjamin Franklin Hotel, Philadelphia The program includes the following subjects

- Emotional Problems in Medical Practice
- Emotional Aspects of Allergy and Dermatology
- Psychopharmacology
- Night Round Table Psychosomatic Medicine—Definitions, Goals, Limitations, Assorted Conflicts and Dilemmas
- Handling the Patient with Chronic Illness
- Emotional Problems in Surgery and the Surgical Specialties
- Are Drug Therapy and Psychotherapy Compatible?
- Psychiatric Education for the Nonpsychiatrist
- Hypnosis

Luncheon panel discussions are planned for each day A plenary session will feature an open discussion moderated by Dr Matthew Brody, Brooklyn, the afternoon of Oct 15 This session will be followed by presentation of motion pictures The annual banquet is scheduled to be held at 8 p m, Oct 14 President of the academy is Dr Wilfred Dorfman, Brooklyn For information, write Dr Bertram B Moss, 55 E Washington, Suite 1035, Chicago 2

Annual Meeting of Insurance Medical Directors — The 69th annual meeting of the Association of Life Insurance Medical Directors of America will be held Wednesday, Thursday, and Friday, Oct 19-21, at the Hotel Statler Hilton, New York City The scientific program will include the following papers

- An Investigator's View of the Life Insurance Medical Research Fund, Dr Stanley E Bradley, New York City
- Alcoholism Dr M Henry Clifford Cincinnati
- High Blood Pressure vs Hypertensive Disease Dr George A Perera New York City
- Obesity—From Man to Mouse and Back Again, Dr William Parson Charlottesville, Va
- Some Data on the Cost of Substandard Life Insurance, Dr John C Talbot, Los Angeles
- Medical Journalism and the American Medical Association, Dr John H Talbott Chicago

- Psychiatric Terminology, Dr Joseph W Johnson, Chattanooga, Tenn

Two panel discussions are planned, titled "Non-Medical Underwriting—Modern Concepts' and "Correspondence with the Applicant's Physician" At the dinner the evening of Oct 20, Dr William B Bean, chairman, department of internal medicine, University of Iowa, Iowa City, will present the dinner address, "Some Historic Sidelights on Medicine's Forgotten Man—the Patient" Dr Ennion S Williams is president of the association

Foundation Announces Awards for 1961 —The Labor Foundation has announced its program of awards for 1961 in support of research on the fundamental biochemical and physiological mechanisms concerned with fertility and the early stages of reproduction in various forms of life The objectives are to further the knowledge and understanding of the basic phenomena involved and to extend and develop the possibilities for effective regulation and control The awards may range up to $8,000 per year Preference will be given to younger members of university and college faculty and staff with an upper age limit of 41 years The work may be carried on at the applicant's own institution or elsewhere The foundation will also grant postdoctorate summer or short-term research awards at the Marine Biological Laboratory at Woods Hole, Mass, or elsewhere for appropriate projects in the fields specified These awards will normally not exceed $1,000 for a single man or a woman, $1,200 for a married man working at his home institution, and $1,350 for a married man with principal program at another institution For information, write the Lalor Foundation, 4400 Lancaster Pike, Wilmington 5, Del The final date for receipt of executed application forms is Jan 16, 1961 Notification of appointment will be on or before March 15

Meeting of Medical College Group —The 71st annual meeting of the Association of American Medical Colleges will be held Oct 30-Nov 1, at the Diplomat Hotel in Hollywood Beach, Fla Medical college costs, the use of private patients for educating the student, the functions and responsibilities of a university, and the doctor's responsibility in a changing world will all come under scrutiny during the three-day convention Dr Thomas H Hunter, dean of the University of Virginia Medical School and AAMC president, will preside over the sessions The $1,000 Borden Award in the Medical Sciences and the Abraham Flexner Award for "outstanding service to medical education" will be presented Monday evening, Oct 31, at the association's annual banquet Dr Joseph T Wearn, Cleveland, recently retired vice-president for medical affairs, Western Reserve University, will give the Alan Gregg Memorial Lecture The exhibit program, the first permitted at an AAMC annual meeting, will consist of educational exhibits from members of medical faculties, publishing and pharmaceutical houses, and also exhibits from organizations whose objectives and programs are closely related to those of the AAMC Interested persons may obtain information from association headquarters, 2530 Ridge Ave, Evanston, Ill

Cancer Seminar in Florida —Dr George Crile Jr, of Cleveland Clinic, Cleveland, will be a featured speaker at the upcoming Southeastern States 1960 Cancer Seminar Dr Crile will speak on the possible role of lymph nodes in the body's defense against cancer and will be a member of round-table discussions underlining the seminar's theme, "New Frontiers of Cancer Research and Therapy" Sixteen physicians, surgeons, pathologists, and radiologists will address the seminar at the Cherry Plaza Hotel in Orlando, Fla, Nov 16-18 The seminar is sponsored by the Orange County (Fla) Medical Society through the cooperation of the American Cancer Society and the Florida State Board of Health Invitations to the conference have already gone out to more than 9,000 doctors throughout the South The seminar has general practice credit approval

Opening of Publishers House in Washington, D C —Butterworths, reportedly the oldest surviving publishing house in London, is opening a new subsidiary company in Washington, D C In 1553 Richard Tottel, of No 7 Fleet Street, London, was granted a special patent by King Edward VI to publish "all authorized books on the Common Lawe" This was the beginning of the House of Butterworth which now has companies operating in England, Canada, New Zealand, and South Africa

Pediatricians Meet in Chicago —The 29th annual meeting of the American Academy of Pediatrics will be held at the Palmer House, Chicago Two-day instruction courses are scheduled for Oct 15 and 16, and half-day round-table courses of limited enrollment will run concurrently with the general sessions, Oct 17-19 Symposiums will be presented under the following titles and chairmen

- Current Concepts of Cell Organization, Dr Rustin McIntosh, New York City
- Surgical Emergencies of the Newborn, Dr H William Clatworthy Jr, Columbus, Ohio
- Basic Concepts in Hypersensitivity, Dr Lewis Thomas, New York City
- Pathogenesis of Hemolytic Anemias, Dr Irving Schulman, Chicago
- Radiation Hazards, Dr Frederic N Silverman, Cincinnati

A panel discussion, "Antibacterial Agents," is scheduled for the afternoon of Oct 18, with Dr Saul Krugman, New York City, as chairman Dr Harold E Harrison, Baltimore, will present "Vitamin D and Calcium and Phosphorus Transport" as the Borden

Award presentation the morning of Oct 19 Clinical sessions will be held at the various Chicago hospitals the afternoon of Oct 20 Section meetings, motion-picture presentations, and alumni meetings are planned Entertainment includes the annual banquet to be held at 8 P M Oct 19 For information, write Dr E H Christopherson, 1801 Hinman Ave, Evanston, Ill, executive director

Regional Meeting of Physicians—The American College of Physicians will hold a regional meeting for Arkansas and Oklahoma Saturday, Oct 15, at the Western Hills Lodge, Sequoyah State Park, Wagoner, Okla The following papers will include invited authors

- Duodenal Ulcer and Addison's Disease Report of a Case Due to Histoplasmosis, Drs David I Kraft, and Joe Matter, Oklahoma City
- The Clinical Aspects of Sarcoidosis, Dr Martin Cummings Oklahoma City
- Report of a Case of Exudative Enteropathy Controlled by Steroid Therapy, Drs Joe B Hall, and Arthur F Moore, Fayetteville, Ark
- Duration of Pituitary Adrenal Hypofunction Following Steroid Therapy, Dr James C Melby, Little Rock, Ark
- Acute Renal Failure, Dr John P Colmore, Oklahoma City
- Protein Electrophoresis An Aid to Clinical Diagnosis, Drs Jack W Stevenson, and William T Snoddy, Oklahoma City
- Pleural Biopsy and Thoracentesis by a New Instrument, Dr James R Lowell, Oklahoma City, and Dr R L Carpenter, Kansas City, Kan
- Recent Adventures in Aviation Medicine, Robert T Clark, Ph D, Norman Okla
- Clinical Diagnosis of Dermatomyositis, Dr G Thomas Jansen, Little Rock, Ark
- Occult Gastrointestinal Bleeding, Dr Ted Clemens Jr, Oklahoma City
- Brain Mechanisms and Atherosclerosis, Dr C G Gunn, Oklahoma City

Guest speaker at the meeting will be Dr Wesley W Spink, of Minneapolis, regent of the college, who will be guest speaker at the banquet, 7 30 P M Dr Edward C Rosenow Jr, executive director of the college, Philadelphia, will also be a guest speaker at the banquet A panel discussion on pyelonephritis is planned For information, write Dr Rosenow, at 4200 Pine St, Philadelphia 4

Industrial Health Conference—The fourth annual Western Industrial Health Conference is being held Oct 7-9 at the Jack Tar Hotel, San Francisco The program includes the following papers

- Evaluation of the Whole Man, Dr Jean S Felton, Oklahoma City
- Fundamentals of Human Behavior, John Zuckerman, Ph D, Edna Mae Klutas, R N, Seattle, and Dr R Christopher Leggo, Palo Alto Calif
- Recurrent Exposures to Carbon Monoxide, Dr John R Goldsmith Berkeley, Calif
- Evaluation of Low Levels of Exposure to Carbon Monoxide, Ross N Kusian, Livermore, Calif
- New Concepts of Industrial Dust Diseases, Dr Seward E Miller, Ann Arbor, Mich
- Health Aspects of Working with Plastics, Herbert T Walworth, Chicago
- Role of Safety in Industrial Health, S K Collins
- Labor's Interest in Occupational Health and Medical Care, Dr Edwin R Weinerman, El Cerrito, Calif
- Rehabilitation—The Advantages and Adversities, Dr Gregory Bard, San Francisco
- Practical Approach to Tetanus Prophylaxis, Dr C Allen Wall, San Francisco
- Occupational Health Resources in San Francisco, Dr Charles H Hine, San Francisco, Dr Asa G Churchill, San Francisco, F R Holden, Ph D S K Collins, M A, and Mary K Dunlap, D V M, San Francisco
- What's Happening in California in Radiation? Thomas N Saunders
- The Industrial Back—Are We Diagnosing It Correctly? Dr Donald W Blanche, Los Angeles, Dr John C Wilson, and Dr George H Patterson, Los Angeles

Speaker at the conference banquet, 7 P M, Oct 7, was Earl A Weilmuenster, Ph D, manager, Propellant Development, United Technology Corp, Sunnyvale, Calif, who presented 'Propellant Fuels' The meeting is approved for Category II credit by the American Academy of General Practice For information, write Dr Earle Dewey, 600 Stockton St, San Francisco

LATIN AMERICA

Election in Nicaragua—On Aug 5, at the general assembly of the Nicaragua Medical Association, the new board of directors was elected for the term of August, 1960, to July, 1961 The new directors are as follows president, Dr Roberto Castillo Q, vice-president, Dr Constantino Mendieta, secretary, Dr Amilcar Ybarra Rojas, vice-secretary, Dr Orlando Castillo, treasurer, Dr Fernando Ocon Vela, vice-treasurer, Dr Santos Jimenez, and delegates, Drs Carlos H Canales, Jaul Cajina, Ricardo Lacavo, and Rosendo Cerda

FOREIGN

Eye Clinic in India—The third Caccamise Memorial Eye Clinic will be conducted in Patna, India, from January to March, 1962 Previous clinics have been characterized by an abundance of eye disease cases and eye surgery cases The clinic and hospital facilities are reported to be comparable with those to be found in the average modern American hospital The techniques utilized in the Eye Clinic are restricted to those that are acceptable by "modern ophthalmology standards" One residency position with full emphasis on medical and surgical ophthalmology will be available Applicants should be less than 28 years of age and unmarried Address inquiries to the Ophthalmologist in Charge, Dr William C Caccamise, 233 Alexander St, Rochester 7, N Y

Pharmacological Meeting in Stockholm—On Aug 22-25, 1961, the first International Pharmacological

Meeting will be held in Stockholm, Sweden, under the auspices of the Section of Pharmacology of the International Union of Physiological Sciences The scientific program will be restricted to topics under the general heading "Mode of Action of Drugs" Main topics will be selected from the following titles

- Pharmacological Control of Release of Hormones, Including Antidiabetic Drugs
- Effects of Drugs on Synthesis and Mobilization of Lipids
- New Aspects of Cardiac Pharmacology
- Drugs and Membranes
- Methods for the Study of Pharmacological Effects at the Cellular and Subcellular Levels
- Metabolic Factors Controlling Duration of Drug Action
- Pharmacological Analysis of Central Nervous Action

For information, write the Secretariat, First International Pharmacological Meeting, Dr. Arvid Wretlind, Karolinska Institutet, Stockholm 60, Sweden

EXAMINATIONS AND LICENSURE

MEDICAL SPECIALTY BOARDS

AMERICAN BOARD OF ANESTHESIOLOGY *Written* Various locations, June 30 *Oral* Kansas City, Apr 17-22 Sec, Dr Forrest E Leffingwell, 217 Farmington Ave, Hartford 5, Conn

AMERICAN BOARD OF DERMATOLOGY Final date for filing applications of candidates completing training by October 5, 1960 is March 1, 1961 *Written* Several cities, June 5, 1961 *Oral* Philadelphia, Oct 13-16, 1961 Sec, Dr Maurice J Costello, One Haven Avenue, New York 32, New York

AMERICAN BOARD OF INTERNAL MEDICINE New York City, Nov 14-17 Closing date for filing application was July 1 *Written* Oct 17 Closing date for filing application was May 1 Schedule for 1961 *Written Examination*, October 16 *Oral Examinations* New Orleans, Jan 30-Feb 2, Chicago, April 4-7, Los Angeles, Sept 26-29, New York City, Nov 7-10 Closing date for acceptance of applications for the January and April examinations is October 1, 1960, and for the September and November examinations is June 1, 1961 Sec-Treas, Dr William A Werrell, One West Main St, Madison 3, Wis

AMERICAN BOARD OF NEUROLOGICAL SURGERY *Oral* New Haven, Nov 13-16 Final date for filing application is Sept 1 Sec, Dr Donald D Matson, 300 Longwood Ave, Boston 15

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY *Written* Various cities of the United States, Canada, and military centers outside of continental United States, January 13 *Oral* Chicago, Apr 7-14 Application for certification, new and reopened in Part I, and requests for reexamination in Part II are now being accepted Deadline for receipt of applications for the written examination was August 1 Candidates submitting applications in 1960 for the 1961 examinations are not required to submit case reports as previously required to complete the Part I examination In lieu of this requirement, new candidates are required to keep in their files a duplicate list of hospital admissions as submitted with their application, for submittal at the annual meeting in Chicago should they become eligible to take the Part II (oral) examination Reopened candidates will be required to submit case reports for review thirty days after notification of eligibility Exec Sec, Dr Robert L Faulkner, 2105 Adelbert Road, Cleveland 6

AMERICAN BOARD OF OPHTHALMOLOGY *Written* Jan 23, 1961 Deadline for filing applications was July 1 Sec, Dr Merrill J King, Box 236 Cape Cottage Branch, Portland, Maine

AMERICAN BOARD OF ORTHOPAEDIC SURGERY *Written and Oral, Part I* Palo Alto, Calif, Nashville, Tenn, Philadelphia, June 19-20 Final date for filing application is Jan 1 *Written and Oral, Part II* Miami Beach, Jan 4-6 Final date for filing application was July 1 Sec, Dr Sam W Banks, 29 E Madison St, Chicago 2

AMERICAN BOARD OF PATHOLOGY *Examination* Indianapolis, Oct 20-22 Final date for filing application was Sept 15 Sec, Dr Edward B Smith, 1100 W Michigan St, Indianapolis 7

AMERICAN BOARD OF PEDIATRICS *Oral* Chicago, Oct 21-23 Final date for filing application has passed *Written* New York City, January Final date for filing application is Dec 1 Sec, Dr John McK Mitchell, 6 Cushman Road, Rosemont, Pa

AMERICAN BOARD OF PHYSICAL MEDICINE *Parts I and II* New York City, June 24-25 Final date for filing application is Feb 15 Sec, Dr Earl C Elkins, 102 Second Ave, S W, Rochester, Minn

AMERICAN BOARD OF PLASTIC SURGERY Entire examination—*written*, and *oral* and *practical* given in May of each year Final date for submitting case reports is January 1 Next examination to be given in New York City, *May 14-16* Corres Sec, Mrs Estelle E Hillerich, 4647 Pershing Ave, St Louis 8, Mo

AMERICAN BOARD OF PSYCHIATRY AND NEUROLOGY New York, New York, Dec 12-13, New Orleans, Mar 20-21, and Chicago, Oct 9-10, 1961 Sec, David A Boyd, Jr, 102-110 Second Ave, S W, Rochester, Minn

AMERICAN BOARD OF RADIOLOGY *Examination* Cincinnati Dec 10-13 Deadline for filing applications for the June examination was Jan 1 Filing deadline for the December examination was July 1 A special examination in Nuclear Medicine (for those diplomates in Radiology or Therapeutic Radiology) will be offered provided there are sufficient applications Sec, Dr H Dabney Kerr, Kahler Hotel Bldg, Rochester, Minn

AMERICAN BOARD OF SURGERY *Written* (Part 1), Various Centers, Dec 7 *Candidates are urged to apply several months before completion of training requirements* The closing date for filing applications was August 1 Those completing training requirements after September 30 cannot be considered for the December Part I examination of the same year *Oral* (Part II)—Indianapolis, Oct 24-25, Buffalo, Nov 14-16, Nashville, Dec 12-13, Philadelphia, Jan 16-17, Houston, Feb 13-14, Columbus, Ohio, Mar 13-14, New York City, April 19-20, Portland, Ore, May 15-16, San Francisco, May 18-19 Sec-Treas, Dr John B Flick, 1617 Pennsylvania Blvd, Philadelphia 3

BOARD OF THORACIC SURGERY *Oral* Oct 1960 Final date for filing application has passed *Written* Various centers throughout the country, Feb 10 Final date for filing application is Dec 1 *Oral* April 1961 Final date for filing application is Dec 1

AMERICAN BOARD OF UROLOGY *Written* December *Oral-Clinical* Chicago, February 1961 Exec Sec, Mrs Ruby L Griggs, 30 Westwood Road, Minneapolis 26

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widely useful...

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In Emotionally Based Smooth-Muscle Spasm

The wide variation in severity of emotionally based gastrointestinal dysfunctions requires a wide range of therapeutic control Pro-Banthīne with Dartal combines, in a single tablet, both therapeutic activity and flexibility to relieve the psychic stress and the enteric distress of such dysfunctions

Clinical trials[1 2] demonstrate that Dartal may be used to treat successfully a wide range of emotional disturbances through simple adjustment of dosage Similarly, the usual daily dosage of Pro-Banthīne may be doubled or tripled without appreciably increasing the incidence or severity of secondary effects[3] and tablets of plain Pro-Banthīne may be added to the antispasmodic-tranquilizing regimen of Pro-Banthīne with Dartal when profound suppression of gastrointestinal hyperactivity is indicated

Combination of the outstanding anticholinergic, Pro-Banthīne, with the well tolerated tranquilizer, Dartal, provides the therapeutic reliability needed in the management of emotionally influenced smooth-muscle spasm

specific clinical applications Functional gastrointestinal disturbances, gastritis, pylorospasm, peptic ulcer, spastic colon (irritable bowel), biliary dyskinesia

dosage One tablet three times daily

supply Aqua-colored, compression-coated tablets containing 15 mg of Pro-Banthīne (brand of propantheline bromide) and 5 mg of Dartal (brand of thiopropazate dihydrochloride)

1 Hock C W Treatment of Gastrointestinal Disorders with an Anticholinergic Tranquilizer Combination J M A Georgia 48 218 (May) 1959
2 Investigators Clinical Reports Analysis of reports by 117 physicians in 500 patients
3 Borowsky H Schwartz S A and Lister J Experience with Short Term Intensive Anticholinergic Therapy of Peptic Ulcer Am J Gastroenterol 27 156 (Feb) 1957

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MEETINGS

AMERICAN MEDICAL ASSOCIATION Dr F J L Blasingame, 535 North Dearborn St, Chicago 10, Executive Vice-President
1960 Clinical Meeting, Washington, D C, Nov 28-Dec 1
1961 Annual Meeting, New York City, June 26-30
1961 Clinical Meeting, Denver, Nov 27-30
1962 Annual Meeting, Chicago, June 11-15
1962 Clinical Meeting, Los Angeles, Nov 26-29
1963 Annual Meeting, Atlantic City

AMERICAN

1960

October

ACADEMY OF PSYCHOSOMATIC MEDICINE Benjamin Franklin Hotel, Philadelphia, Oct 13-15 For information write Dr Bertram B Moss 55 E Washington Chicago 2

AMERICAN ACADEMY FOR CEREBRAL PALSY, Penn-Sheraton Hotel, Pittsburgh, Oct 5-8 Dr Joseph D Russ, 1520 Louisiana Ave, New Orleans 15, Executive Secretary

AMERICAN ACADEMY OF OPHTHALMOLOGY & OTOLARYNGOLOGY Palmer House Chicago Oct 9-14 Dr William L Benedict, 15 Second St, S W Rochester, Minn, Executive Secretary

AMERICAN ACADEMY OF PEDIATRICS Palmer House, Chicago, Oct 17-20 Dr E H Christopherson, 1801 Hinman Ave, Evanston Ill, Executive Director

AMERICAN ASSOCIATION OF MEDICAL CLINICS, New Orleans Oct 6-8 Dr Joseph B Davis, 134 N Washington St, Marion, Ind Secretary

AMERICAN ASSOCIATION OF MEDICAL RECORD LIBRARIANS, Olympia Hotel Seattle, Oct 10-13 Miss Doris Gleason, 840 N Lake Shore Dr, Chicago 11, Executive Director

AMERICAN ASSOCIATION OF POISON CONTROL CENTERS, Palmer House, Chicago Oct 18 Dr Harry C Shirkey 712 S 30th St, Birmingham, Ala Chairman, Program Committee

AMERICAN COLLEGE OF CARDIOLOGY, Kiel Auditorium, St Louis, Oct 21-23 Dr Philip Reichert, Empire State Bldg, New York 1, Executive Director

AMERICAN COLLEGE OF GASTROENTEROLOGY, Bellevue-Stratford Hotel Philadelphia, Oct 23-26 Mr Daniel Weiss, 33 W 60th St, New York 23, Executive Director

AMERICAN COLLEGE OF SURGEONS, Clinical Congress, San Francisco, Oct 10-14 For information write Dr William E Adams, 40 E Erie St, Chicago 11

AMERICAN FRACTURE ASSOCIATION El Presidentia Hotel Mexico D F, Mexico, Oct 30-Nov 4 Dr H W Wellmerling, 610 Griesheim Bldg, Bloomington, Ill Executive Secretary

AMERICAN HEART ASSOCIATION, INC, Jefferson Hotel, St Louis, Oct 21-25 Mr Rome A Betts, 44 E 23rd St, New York 10, Executive Director

AMERICAN OTORHINOLOGIC SOCIETY FOR PLASTIC SURGERY, INC Conrad Hilton, Chicago Oct 9 Dr Joseph G Gilbert, 75 Barberry Lane, Roslyn Heights, L I, New York, Secretary

AMERICAN PUBLIC HEALTH ASSOCIATION, San Francisco, Oct 30-Nov 4 Dr Berwyn F Mattison 1790 Broadway, New York 19, Executive Director

AMERICAN RHINOLOGIC SOCIETY Belmont Hotel, Chicago, Oct 6 Dr Robert M Hansen, 1735 N Wheeler Ave, Portland 17, Ore, Secretary

AMERICAN SCHOOL HEALTH ASSOCIATION, San Francisco, Oct 30-Nov 4 Dr A O DeWeese, 515 E Main St, Kent, Ohio, Executive Secretary

AMERICAN SOCIETY OF FACIAL PLASTIC SURGERY, Chicago, Oct 13 Dr Samuel M Bloom, 123 E 83d St, New York 28 Secretary

ARIZONA ACADEMY OF GENERAL PRACTICE, Hotel Valley Ho Scottsdale, Ariz, Oct 13-15 For information write Dr Arthur V Dudley Jr, 1524 North Norton Tucson Ariz

ASSOCIATION OF AMERICAN MEDICAL COLLEGES Diplomat Hotel, Hollywood Beach Fla, Oct 31-Nov 2 Dr Ward Darley, 2530 Ridge Ave, Evanston, Ill Executive Director

ASSOCIATION OF LIFE INSURANCE MEDICAL DIRECTORS OF AMERICA, Statler-Hilton Hotel, New York City Oct 19-21 Dr Royal S Schaaf, Asst Med Dir, Prudential Insurance Co of America, Newark, N J, Secretary

ASSOCIATION OF MILITARY SURGEONS OF THE UNITED STATES, Mayflower Hotel Washington, D C Oct 31-Nov 2 Lt Col George M Beam, AUS, Retired, 1726 Eye St, N W, Washington 6 D C

ASSOCIATIONS OF STATE AND TERRITORIAL HEALTH OFFICERS Jack Tar Hotel, San Francisco, Oct 26-28 Dr A C Offutt, 1330 W Michigan St Indianapolis 7, Secretary-Treasurer

CALIFORNIA ACADEMY OF GENERAL PRACTICE, Masonic Memorial Temple, San Francisco, Oct 16-19 Mr William W Rogers 461 Market St, San Francisco 5 Executive Secretary

CENTRAL ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS, Kansas City, Mo Oct 6-8 Dr Herman L Gardner, 633 Hermann Professional Bldg, Houston 25, Texas Secretary-Treasurer

CENTRAL NEUROPSYCHIATRIC ASSOCIATION, French Lick, Ind, Oct 14-15 Dr Ralph M Patterson, 473 W 12 Ave, Columbus 10, Ohio Secretary

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(Continued on page 42)

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Graduate Medical Education in the United States

John C Nunemaker, M D, John Hinman, M D, Willard V Thompson, M D and Rose Tracy

TABLE OF CONTENTS

Annual Report 573
Internship 573
Internships by Type of Service 573
Internships by Type of Hospital Control 574
Internship by Medical School Affiliation and Hospital Bed Capacity 574
Internships by Census Region and States 575
Internship Stipends and Maintenance 575
National Intern Matching Program 576
Foreign Medical Graduates 576
Residency Training Programs 576
Residencies by Specialty 577
Residencies by Type of Hospital Control 577
Residencies by Medical School Affiliation and Bed Capacity 577
Residencies by Census Region and States 578
Residency Stipends 578
Foreign Medical Graduates 579
Hospital Autopsy Rates 581
Other Graduate Trainees by Specialty 581
Family Practice Program 582
Projection for the Future 583
Consolidated List of Hospitals with Approved Graduate Training Programs 585
National Intern Matching Program 626
Directory of Approved Internships 637
Essentials of an Approved Internship 663
Directory of Approved Residencies 675
Educational Council for Foreign Medical Graduates 814
Special Announcements and Notices 816
Financial Assistance for Graduate Training in Medicine (AAMC) 816
National Intern Matching Program and the Foreign Medical Graduate 816
Changing Requirements for American Specialty Board Certification 817
Forensic Pathology 817
Internal Medicine 817
Obstetrics and Gynecology 817
Orthopedic Surgery 817
Otolaryngology 817
Pediatrics 817
Psychiatry and Neurology 817
Radiology 818
Eligibility of Foreign Medical Graduates 818
Changes in Listing Approved Residency Programs 818
Subspecialties of Internal Medicine 818
Child Psychiatry 818
Revision of the Essentials of an Approved Internship 818
Revision of the Essentials of Approved Residencies 818

Because of space restrictions the sections on Essentials of Approved Residencies and Requirements for Certification of the American Specialty Boards were omitted These sections will appear in bound volumes which are available upon request

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ANNUAL REPORT ON INTERNSHIPS AND RESIDENCIES

THE 34th Annual Report on Internships and Residencies in this issue of THE JOURNAL contains statistical data on the performance of approved graduate training programs in the United States, Hawaii, Puerto Rico, and the Canal Zone As before, it contains the data pertaining to the year 1959-1960 secured for Sept 1, 1959, in most instances The *Directory of Approved Internships and Residencies*, on the other hand, lists positions offered for the year 1961-1962 Of the hospitals listed, 50% offer internships and residencies, 40% offer only residencies, and 10% only internships

It will be noted that there was a slight increase in the number of internships offered last year and a very slight decrease in residencies offered, so that the total number of positions available, 44,313, was only 26 greater than in the previous year, thus nfirming the leveling-off which was anticipated

ie stipends for internships increased, and the beginning stipends for residencies showed a wider range Occupancy rate for internships fell off 1%, whereas occupancy rate for residencies increased 3%

Last year there was a 13% increase in the number of foreign graduates serving internships and residencies, and a number of additional tables reveal their participation by specialty as well as by state, since they now constitute 25% of all the trainees on duty in approved programs

A total of 31,036 physicians were pursuing specialty training in hospitals, and 3,505, or 11%, held appointments other than as residents

Considerable additional information is furnished on the administrative aspects of training programs, particularly with reference to stipends, maintenance, other benefits, and marital status Last year's chart showing the remarkable growth of training programs in the post-World-War-II era is reported this year as a table, so that the exact figures are available for study

Only 21% of the nation's hospitals, with 50% of the total beds, provide the academic environments associated with approved training programs Hospital medical care in the other 5,407 hospitals, with 800,672 beds, therefore is delivered without the assistance of approved training programs

NEW FORMAT OF THE DIRECTORY

With this issue, the long-established format of the *Directory of Approved Internships and Residencies* has been altered at considerable effort and expense in the interest of more accurate communication between the groups responsible for maintaining standards of approval and the groups actively engaged in conducting training programs For the first time, basic data formerly available for only those hospitals having internships are now available for the more than 40 per cent of hospitals whose approved programs are limited to residencies The consolidated list gives (for all hospitals) the medical school affiliation and degree of control, total beds, total autopsy rate, the type of organization operating the hospital, and names the variety of internships and residency programs approved for each hospital

For residency programs, specific data are available for the first time as to average census in each specialty, the autopsy rates for each specialty in each hospital, the actual structure of each training program in terms of positions available for each year, and further data as to range of stipends and other forms of support

Republication of the "Essentials of an Approved Internship" and "Essentials of Approved Residencies" brings to the attention of all trainees, probably for the first time, those elements in the organization of an approved training program which should be available to each trainee Program directors will henceforth have immediate access to the existing standards of approved programs as contained in the "Essentials"

The "Essentials" charge every hospital with the responsibility for maintaining a permanent record of the service assignments and performance of its trainees This will become a matter for specific attention by the field representatives of the Council and by each Review Committee on the occasion of each program survey

SERVICE TO THE YOUNG PHYSICIAN

For nearly a decade, the National Intern Matching Program has provided all fourth-year American medical students with a directory of participating hospitals which have approved internship programs

This year, for the first time, all fourth-year American medical students will receive this entire *Internship and Residency Number* of THE JOURNAL appropriately bound as the *Directory of the National Intern Matching Program* They now have the additional opportunity to become thoroughly familiar with the lists of available approved residency programs, the requirements of the various specialty boards, and the basic "Essentials" which

specify the standards of graduate training maintained by the Council on Medical Education and Hospitals as approved by the House of Delegates of the American Medical Association

It seems inappropriate that the large number of interns and residents now in training in about 1,500 American hospitals should not have this valuable manual available to them unless they happen to subscribe to THE JOURNAL *It is therefore urged that hospital officials and appropriate medical societies cooperate in collecting adequate numbers of this issue of* THE JOURNAL *from those physicians willing to donate their copies to hospitals with approved training programs* Thus, it should be a simple matter for each young physician in training to receive a copy of the *Internship and Residency Number* of THE JOURNAL for his personal use and for the hospital medical library to maintain additional copies for reference or for distribution The state licensure requirements as published in the *State Board Number* of THE JOURNAL, May 28 1960, might also be included in the library of each young physician

THE FOREIGN MEDICAL GRADUATE

A special article in this issue of THE JOURNAL, P 814, describes the program and policies of the Educational Council for Foreign Medical Graduates At the last two successive meetings of the House of Delegates, resolutions proposing change in the policy regarding ECFMG certification by July 1, 1960, were rejected The current policy is repeated, in essence, by insertion in the appropriate portion of both the Essentials of an Approved Internship" and the "Essentials of Approved Residencies" in this issue Attention of all is called to the fact that Dec 31, 1960, is the final date for compliance with the stated policy The American Hospital Association has announced this same date for clearing the hospital rolls of uncertified foreign medical graduates if hospitals wish to retain their places on the list of the American Hospital Association and, accordingly, their status of accreditation by the Joint Commission

In the past year all American specialty boards have considered the eligibility of the foreign medical graduate for certification, and all boards will now accept foreign graduates under certain conditions, some more restrictive than others

Attention is called to the announcement of the National Intern Matching Program that the year from 1961 to 1962 will be the last year for which participating hospitals may appoint foreign graduates as interns outside the Matching Program

This year the Council on Medical Education and Hospitals and the Institute of International Education joined with the Circulation and Records Department of the American Medical Association to take one census of all interns and residents—American as well as foreign graduates The Immigration and Naturalization Service and the Educational Council for Foreign Medical Graduates are cooperating fully with the Council on Medical Education and Hospitals in its mission of maintaining only one standard of graduate medical education

ECFMG certification for the foreign medical graduate is not only necessary for his continued graduate training in this country, but may well become a requirement for certification by the majority of specialty boards and, in many instances, for reciprocity licensure in states other than the original one in which a foreign medical graduate may have become licensed

FAMILY PRACTICE PROGRAM

Widespread interest has been shown by many hospitals in reestablishing a basic two-year program of graduate education similar to that prior to World War II As late as 1941, 22 per cent of the approved internship programs were from 12 to 24 months in duration, especially in hospitals affiliated with medical schools Resolutions aimed at reestablishing the two-year internship have been introduced repeatedly at the annual sessions of the House of Delegates, although the objective was sometimes for a better distribution of interns to those hospitals with recruitment difficulties

The new two-year program in family practice approved by the House of Delegates, June, 1959, is now being established in carefully selected hospitals Such pilot programs will be studied advertently by the Council staff and advisory committee in anticipation of the day when sufficient knowledge will have accumulated so that 'Essentials" can be written, thus opening the program to all hospitals which can qualify At that time the question of including the elective period on obstetrics as a compulsory item will be carefully considered It is possible that some hospitals now approved for internship training or general practice residency training may not qualify, since the standards of the new two-year program in family practice must necessarily be high if they are to have appeal to hospital staffs as well as to prospective trainees These programs will be listed in the National Intern Matching Program as are internships

It is altogether likely that some hospitals which can qualify for this new program may wish to abandon their present one-year rotating internships The length is a desirable feature of the program since it permits the young trainee an additional year of deliberation before deciding whether he should enter general practice or pursue a specialty

After enough programs have been operative for a sufficient period of time, it is possible that certain American specialty boards may grant credit toward

qualification for specialty certification for certain portions of these family practice programs A commitment from any board at this time is inappropriate

It is not inappropriate, however, to hope that successful launching of this program on a firm foundation and with the solid backing of medical educators in community and university hospitals might result in this two-year program in family practice becoming the basic program for all graduate training in the future Thus the day might dawn when the one-year rotating internship would disappear, and all men going into further specialty training would enter with the same basic hospital training

ROADS TO ROME

Perusal of the section of this issue having to do with announcements of changes in the requirements of the various American specialty boards for certification in certain of the subspecialties reveals a difference in philosophy as to the mechanisms by which specialists may qualify for subspecialty certification

Whereas the American Board of Internal Medicine has indicated that it will continue to certify in four subspecialties, the Council has agreed to discontinue the listing of approved residencies in those subspecialties The general philosophy is that mature young physicians who have completed the formal requirements for general certification in internal medicine and who have decided upon further subspecialty training should have no need for a list of approved training programs in order to determine the pattern and location of training opportunities that would enable them to obtain the types of knowledge specified by the subspecialty boards The medical subspecialty boards have described the knowledge a candidate should possess but are not going to prescribe or proscribe the means of acquiring it

On the other hand, the American Board of Pediatrics has announced subspecialty certification in the specialties of pediatric allergy and pediatric cardiology, and the American Board of Psychiatry and Neurology has announced certification in child psychiatry In accord with this policy, the appropriate residency review committees are now approving residency training programs in pediatric allergy and child psychiatry, and lists will appear in the *Internship and Residency Number* of THE JOURNAL

Since other specialty boards will undoubtedly be considering further subspecialty certification, it is imperative that the Advisory Board for Medical Specialties comes to a clear-cut policy on the criteria on which additional subspecialty certification will be justified It is also important that the Council on Medical Education and Hospitals have an incisive policy on this matter since the original action of the House of Delegates regarding recognition of new certification boards in medical specialties did not specify the policy for new areas of subspecialty certification The question arises as to whether the creation of new subspecialty boards is not in effect creating new specialties and whether this is in the interest of either the teaching hospitals, the parent specialty, the practicing physician, or the consuming public Furthermore, all who are concerned with the problem of training medical specialists must be perplexed at the policies of equally sincere and respected boards with regard to the place of subspecialty residency training In one instance the listing of approved residencies in the subspecialties is being discontinued, and in the other lists of approved residencies in new subspecialties are appearing How many are the roads to Rome for the specialist who wishes qualification in a subspecialty?

WHAT PRICE WHISTLES?

The Council on Medical Education and Hospitals finds that very little data exist on the subject of costs of training programs In liaison with the Council on Medical Services, this subject is being studied intensively with particular reference to the variety of sources of support for the costs of training programs

One aspect of universal concern is the inadequacy in compensation of interns and residents, particularly in this day of increased costs of living for the apparently-permanent predominance of benedicts While internship and residency training programs have always been considered full-time activities, the attitude of the Council is that adequate free time should be available for study in the specialty as well as for purposes of relaxation and maintenance of continued health on the part of the trainee Situations have now developed in certain of the nation's large medical centers where it is alleged that hospital administrative officials, program directors, and local medical societies condone the part-time outside practice of residents during their "off-duty hours"

It would appear that those hospitals which permit residents an outside practice do so in order to enhance recruitment and thereby assure themselves of the services of residents in training programs which are under-financed Residents in such programs boast of being able to have their cake and eat it too They, as well as hospital officials, are reminded that crow and humble pie may become the diet of those who unwittingly place cake before conscience The resident who subordinates intellectual solvency to financial gain during his graduate training period may discover too late that he paid too much for his whistle

ANNUAL REPORT

The 34th Annual Report on Graduate Medical Education in the United States is submitted herewith, consisting of detailed information and statistical data on all intern and resident training programs approved by the Council

While this annual report is concerned primarily with a statistical and narrative analysis of the performance of approved programs during the academic year from 1959 to 1960, the *Internship and Residency Number* of THE JOURNAL has been markedly increased in size this year This increase in size is due in part to a revision of the format for reporting the lists of approved internships and residencies, the particular changes being a new consolidated list for all hospitals with approved training programs, an improved method of listing by state and city, and the inclusion of considerable additional data about all programs Also, the "Essentials of an Approved Internship' and the Essentials of Approved Residencies' are published in their entirety and with all current revisions, thus re-establishing a pattern that was discontinued after World War II The requirements of the American Specialty Boards are published as before with an additional table listing the essential features of all Specialty Board requirements and containing a special portion applicable to the foreign medical graduate (Because of space limitations, the Essentials of Approved Residencies" and the requirements of American Specialty Boards appear only in bound volumes of the Directory but are available as separate reprints)

The entire *Internship and Residency Number* of THE JOURNAL will be reprinted as the *Directory of Approved Internships and Residencies,* and in addition, 10,000 copies are specially bound as the *Directory of the National Intern Matching Program* This number of THE JOURNAL, therefore, identified as the *NIMP Directory,* will be distributed by the National Intern Matching Program to all fourth-year medical students in the United States to be used in their participation in the National Intern Matching Program In addition, the Directory will, for the first time, contain valuable information for the young medical graduate which is necessary to his further cognizance if additional specialty training is desired It is expected that the inclusion of the "Essentials" in this issue will bring to the attention of medical students, for the first time, the standards by which intern and resident training programs are approved and will make available to all training program directors the same standards for repeated reference

For the detail work in preparing the lists of internships residencies and the Specialty Board requirements the Council staff is especially indebted to Miss Catherine Hayes Mrs Mildred Kaiser and Miss Dorothy Duncan

Additional tables have been included in the annual report to show the degree to which the foreign medical graduate participates in training programs in the United States Several editorials emphasize the varying points of concern which are repeatedly brought to the attention of the Council staff by program directors and others who are concerned with the hospital practice of medicine in the United States

The many different groups participating with the Council in review activities were enumerated in the '33rd Annual Report' published in THE JOURNAL for Oct 10, 1959, and will not be repeated here

This issue lists the approved junior internships in Canada approved by the Canadian Medical Association The Council, itself, does not approve either internship or residency training programs in Canada Except for Puerto Rico and Hawaii, the Council does not approve intern and resident training programs outside the continental United States, and it does not compile information on graduate training opportunities elsewhere in the world

Internship

Table 1 reveals that for the intern year from 1959 to 1960 there were 12,580 positions offered in 865 hospitals The average number of interns per hospital was accordingly 14 5, about the same figure as reported last year Since hospitals may offer more than one type of internship, there were 1,097 different intern programs, resulting in a figure of 11 5 interns per program on the average

Internships, by Type of Service

The three types of internships approved by the Council are (1) rotating, which includes training on medical, surgical, pediatric, and obstetric services, (2) mixed, providing training in two or three of the above four major clinical services as well as pathology or psychiatry, in a mixed internship, the assignment to the major service must be not less than six nor more than eight months, and the hospital must have an approved residency program in that specialty, and (3) straight, providing training on a single medical, surgical, pediatric, obstetrics-gynecology, or pathology service in a hospital holding residency approval in that specialty

Table 2 reveals the distribution of internships according to type and reveals the occupancy for each type on Sept 1, 1959 It will be noted that rotating internships comprised 74% of the programs and 86% of the positions offered, mixed internships comprised only 3% of the programs and only 2% of the positions offered, straight internships provided 22% of the programs and only 12% of the positions Two family practice programs approved

during the past year offered seven positions which were unfilled because of the late establishment of the programs Rotating internships were 81% filled, a loss of 2% compared with the previous year, while mixed internships were 92% filled, representing a loss of 1% compared with last year Straight internships were 87% filled, a gain of 2% compared with last year, and the highest rate of occupancy was shown by straight internships in internal medicine which were 94% filled

TABLE 1 —Number of Internships, 1951 1960

	No of Hospitals	No of Internships
1951	825	10 044
1952	865	11 467
1953	856	11 006
1954	841	10 624
1955	850	11 648
1956	867	11 616
1957	852	11 895
1958	867	12 325
1959	856	12 469
1960	865	12 580

Of the total of 12,580 available internships, 10,253 were filled and 2,327 were vacant for a percentage filled of 82%, a loss of 1% from the figure existing the previous four years

Internships, by Type of Hospital Control

Table 3 classifies internships according to whether control of the hospital was federal, governmental (nonfederal), nongovernmental, or proprietary, and reveals that the 679 nongovernmental hospitals comprise 78% of the total of 865 The nongovernmental hospitals offered 63% of the available positions, averaging 12 interns per hospital The governmental hospitals which were nonfederal comprised 17% of the total, but because of their generally larger size, offered 31% of the positions with an average intern complement per hospital of 27 The federal hospitals comprised only 5% of the total, offered 5% of the positions, and had average intern complements of 16 per hospital The proprietary hospitals were only 1% of the total, offered less than 1% of the positions, and averaged only six interns per hospital

TABLE 2 —Number of Internships, by Type of Service, 1959 1960

Type of Internship	No of Approved Programs	No of Internships: Filled Sept 1, 1959	Vacant Sept 1, 1959	Per centage Filled
Rotating	816	8 769	2 110	81
Mixed	33	213	19	92
Straight				
Internal Medicine	79	671	45	94
Surgery	74	375	63	86
Pediatrics	56	165	64	72
Pathology	32	61	14	81
Obstetrics and Gynecology	5	8	2	62
Totals	246	1 280	191	87
Family Practice Programs	2		7	
Grand Totals	1 097	10,253	2,327	82

As in the past, the highest occupancy rate was shown for the group of hospitals controlled by the federal services, averaging 95%, with the uniformed services being the most successful except for the one United States Air Force Hospital The great bulk of Air Force interns serve in hospitals of the Army and are included in that figure for the Army which includes 56 positions assigned to the Air Force The other governmental hospitals were in second place with 84% occupancy, while the large group of nongovernmental hospitals showed 79% of positions filled, a decrease of 2% from last year Last year, the one proprietary hospital operated as a partnership, had only 38% internships filled, the Veterans Administration had 44% filled, and the church controlled hospitals had 78% filled This year, the lowest figure for the entire group was 74% filled in city-county hospitals, while state hospitals and church controlled hospitals showed an occupancy rate of 76% Outside the federal hospitals and the one partnership hospital, the highest percentage of filled positions was 92% for county hospitals

TABLE 3 —Number of Internships, by Type of Hospital Control 1959 1960

Control	No of Hospitals	No of Internships: Filled Sept 1, 1959	Vacant Sept 1, 1959	Per-centage Filled
Federal				
U S Army	10	229*	1	99
U S Navy	14	176		100
U S Air Force	1	25	11	69
U S Public Health Service	7	88		100
Veterans Administration	6	77	6	91
Other Federal	3	36	13	73
Totals	40	609	30	95
Governmental (Nonfederal)				
State	95	773	241	76
County	38	945	83	92
City	48	1 277	234	85
City County	12	233	84	74
Hospital District	3	60	6	91
Totals	136	3 288	648	84
Nongovernmental				
Church	311	2 490	783	76
Nonprofit Corporations	368	3 816	854	82
Totals	679	6 306	1 637	79
Proprietary				
Partnership	1	8		100
Corporations unrestricted as to profit	9	42	12	78
Totals	10	50	12	81
Grand Totals	865	10 253	2 327	82

* Includes 56 positions assigned to the U S Air Force

Internships, by Medical School Affiliation and Bed Capacity

Table 4 reveals that of the total of 865 hospitals with approved programs, exactly 75% are not affiliated with medical schools and 25% are affiliated While the group of affiliated hospitals comprises only one-fourth of the total, 71% have over 300 beds and 40% over 500 beds The nonaffiliating group, comprising three-fourths of the total hospitals, have only 10% with more than 500 beds and 44% with more than 300 beds The affiliated hospitals offer 43% of the available positions and the nonaffiliated group offers 57% The affiliated group of hospitals secured 45% of the candidates and the nonaffiliated

group secured 55% of the total candidates Of the 7,159 positions offered by the nonaffiliated hospitals, 79% were filled This figure bears out the figures for previous years indicating the greater popularity of internships in affiliated hospitals For both groups, the highest percentage of filled positions existed in the hospitals of 500 beds and over

Internships, by Census Region and States

Table 5 reveals the distribution of internships by state and census region and reveals a fall in positions filled in the New England area from 90% last year to 85% this year The leaders were the mountain and Pacific states with 90% of positions filled

TABLE 4 —Number of Internships by Medical School Affiliation and Bed Capacity 1959 1960

Classification	No of Hospitals	No of Internships: Filled Sept 1 1959	Vacant Sept 1 1959	Percentage Filled
Nonaffiliated				
Less than 200 beds	114	617	156	79
200-299	240	1 662	536	75
300-499	220	2 213	580	74
500 over	66	1 182	213	84
Totals	650	5 674	1 485	79
Affiliated				
Less than 200 beds	23	89	64	58
200 299	40	416	112	79
300-499	66	1 012	176	85
500-over	86	3 062	489	86
Totals	215	4 579	842	84
Grand Totals	865	10 253	2 327	82

and the west-north central states had the lowest total of 72% filled Those states with less than 60% of the positions filled were Delaware, Indiana, Kentucky, Nebraska, New Mexico, and Wisconsin Those states with less than 70% of the positions filled were Kansas, Maine, Missouri, and Virginia, and the Commonwealth of Puerto Rico Those states and territories having more than 90% of positions filled were California, Canal Zone, Colorado, District of Columbia, Hawaii, Montana, New Hampshire, New York, Utah, and Vermont

The largest single group by census region was the three middle Atlantic states of New Jersey, New York, and Pennsylvania which had 26% of the hospitals with approved programs, offered 26% of the total positions, and secured 27% of the available interns The mountain and Pacific states comprised 12% of the hospitals, offered 13% of the positions, and secured 14% of the total interns Alaska, Idaho, Nevada, and Wyoming have no approved internship training programs

Internship Stipends and Maintenance

For the year from 1959 to 1960 there was again an increase in monthly stipends, a trend which had apparently stopped last year

Data were available for 834 nonfederal hospitals of which 213 were affiliated and 621 nonaffiliated For affiliated hospitals the average cash stipend per internship for the year beginning July 1, 1959, was $166 00, a 7% increase over the figure paid the

TABLE 5 —Number of Internships, by Census Region and State, 1959 1960

Census Region and State	No of Approved Programs	No of Hospitals	No of Internships: Filled Sept 1 1959	Vacant Sept 1, 1959	Percentage Filled
New England					
Connecticut	24	21	204	31	87
Maine	3	3	14	8	64
Massachusetts	55	41	387	62	86
New Hampshire	1	1	16		100
Rhode Island	7	7	64	23	74
Vermont	2	2	12		100
Totals	92	75	697	124	85
Middle Atlantic					
New Jersey	46	42	429	80	84
New York	173	107	1 738	157	92
Pennsylvania	77	77	646	231	74
Totals	296	226	2 813	468	86
East North Central					
Illinois	55	50	654	100	87
Indiana	18	15	96	92	52
Michigan	40	40	477	136	78
Ohio	67	54	645	161	80
Wisconsin	24	23	136	99	58
Totals	204	182	2 008	588	77
West North Central					
Iowa	8	8	78	11	88
Kansas	11	6	67	30	69
Minnesota	19	14	200	41	83
Missouri	35	24	285	148	67
Nebraska	10	10	47	46	51
North Dakota	3	3	13	5	72
South Dakota	3	3	18	4	82
Totals	89	68	708	280	72
South Atlantic					
Delaware	3	3	19	15	56
District of Columbia	14	11	234	22	91
Florida	22	17	191	40	83
Georgia	22	17	217	34	86
Maryland	35	21	286	49	86
North Carolina	29	12	169	52	76
South Carolina	7	7	84	16	84
Virginia	26	20	183	87	68
West Virginia	10	10	69	20	78
Totals	171	118	1 452	335	81
East South Central					
Alabama	9	6	80	33	71
Kentucky	14	10	69	54	56
Mississippi	2	2	31	4	89
Tennessee	19	15	221	48	82
Totals	44	33	401	139	74
West South Central					
Arkansas	9	3	52	13	80
Louisiana	12	11	179	70	72
Oklahoma	8	7	84	10	89
Texas	33	25	308	103	75
Totals	62	46	623	196	76
Mountain					
Arizona	5	5	52	7	88
Colorado	16	13	151	14	92
Montana	1	1	4		100
New Mexico	1	1	5	7	42
Utah	12	7	90	7	93
Totals	35	27	302	35	90
Pacific					
California	61	51	843	82	91
Hawaii	4	4	63	2	97
Oregon	8	7	78	23	77
Washington	21	18	177	22	89
Totals	94	80	1 161	129	90
Territories and Possessions					
Canal Zone	1	1	15		100
Puerto Rico	9	9	73	33	69
Totals	10	10	88	33	73
Grand Totals	1 097	865	10 253	2 327	82

previous year For nonaffiliated hospitals, the average monthly cash stipend was $207 00 or an increase of 4 5% over the average paid each of the previous two years Accordingly, the nonaffiliated hospitals paid an average of $41 00 per month more than the affiliated hospitals

TABLE 6 —Monthly Internship Stipends

Dollars Per Month	Blank*	0-50	51-100	101-150	151-200	201-250	251+	Total Hospitals
Single	37	13	84	187	224	182	138	865
Married	89	12	67	134	183	188	192	865

*Data not included because of program structure Federal Hospitals etc

Table 6 indicates the range of stipends for interns on a basis of marital status The table is arranged to show stipends in increments of $50 00 per month and also shows a blank for the Federal and other programs not analyzable There were 865 hospitals reporting data and it is clear the large bulk of hospitals pay more than $100 00 per month 16% of the hospitals paid the single intern more than $250 00 per month while 22% paid this amount to the married intern For each stipend group above $50 00 per month, approximately twice as many hospitals provided partial maintenance for the married intern as for the single intern

For the single intern, full maintenance was paid by 74% of the hospitals, partial maintenance by 18%, and no maintenance by 8% For the married intern, full maintenance was provided by only 52%, but partial maintenance was provided by 35% and no maintenance by 13% of the hospitals For the single intern, full maintenance was provided by 0% of the affiliated and by 79% of the nonaffiliated hospitals For the married intern, full maintenance was provided by 42% of the affiliated and by 56% of the nonaffiliated hospitals Partial maintenance was provided for the single intern by 28% of the affiliated hospitals but by only 15% of the nonaffiliated hospitals, whereas partial maintenance for the married intern was provided by 42% of the affiliated and 33% of the nonaffiliated hospitals

In the "Directory of Approved Internships" in this issue, the beginning stipend is listed plus the letters FM and PM to indicate full or partial maintenance An asterisk (*) signifies that additional benefits are paid to the married intern

National Intern Matching Program

This issue contains a full description of the operation of the Matching Program as well as copies of the hospital and student agreements and dates for operation of the Matching Program The report of the Eighth Intern Matching Program was published in THE JOURNAL in February, 1960, and in the *Journal of Medical Education* in March, 1960 The results of the Eighth Matching Program showed that for the year from 1959 to 1960, 12,250 internships were available through NIMP and 6,478 were matched to students, while 5,772 were unfilled. The results of the Ninth Annual Matching Program were announced in March, 1960, and revealed there were 12,381 internships to be filled through the plan, 6,672 students were matched and 5 709 internships were unfilled

Elsewhere in this issue attention is called to the announcement of the requirement for participation of foreign medical graduates for the year from 1962 to 1963

Foreign Medical Graduates

Data on foreign medical graduates were secured from the Institute of International Education, 1 E 67th St New York 21, N Y, as a result of a census

TABLE 7 —Number of Residencies by Specialty, 1959 1960

Specialty	No of Appr Programs	No of Residencies: First Year Appointments: Filled Sept 1 1959	Vacant Sept 1 1959	Percentage Filled	Total Appointments (All Yr): Filled Sept 1 1959	Vacant Sept 1 1959	Percentage Filled
Allergy	22	14	4	77	21	7	75
Anesthesiology	237	629	82	88	1 235	178	87
Cardiovascular Disease	73	75	6	92	114	21	84
Dermatology	78	105	9	92	204	26	92
Gastroenterology	42	16	7	70	53	18	75
General Practice	187	403	117	78	528	189	74
Internal Medicine	627	2 256	242	90	4 941	584	89
Neurological Surgery	131	107	12	90	341	43	89
Neurology	128	142	40	78	340	80	81
Obstetrics	27	42	2	95	48	3	94
Gynecology	9	5	1	83	22	2	92
Obstetrics Gynecology	446	908	82	95	2 358	139	94
Ophthalmology	171	264	16	94	738	46	94
Orthopedic Surgery	300	347	25	93	1 159	102	92
Otolaryngology	130	175	12	94	468	38	92
Pathology	711	812	207	75	1 923	715	73
Pediatrics	295	858	99	89	1 686	164	91
Pediatric Allergy	22	5	2	71	6	6	50
Physical Medicine	76	49	42	49	138	102	58
Plastic Surgery	60	39	5	89	110	11	91
Proctology	16	8	5	62	19	17	53
Psychiatry	303	1 128	270	81	3 009	649	82
Pulmonary Disease	108	169	40	81	239	67	78
Radiology	376	844	124	87	1 435	346	87
Surgery	723	2,135	190	92	5 483	391	93
Thoracic Surgery	112	92	13	88	179	28	86
Urology	237	207	42	86	636	115	85
Totals	5 647	11 491	1 735	87	27 581	4 087	87
Other than hospitals							
Aviation Medicine	3	3	1	75	17	4	81
Occup Medicine (In plant)	13	7	9	44	7	9	44
Public Health	23	27	26	51	55	43	55
Totals	39	37	36	51	79	56	51
Grand Totals	5 686	11 531	1 771	87	27 660	4 144	87

obtained through inclusion with the annual questionnaire mailed by the Council in the Fall of 1959 For the year from 1959 to 1960, 2,545 foreign medical graduates served as interns in approved training programs Additional data involving foreign graduates will be discussed in the appropriate section for residency training programs

Residency Training Programs

This section of the report follows the general format of previous reports, but because of the interest in the participation of foreign physicians in

American training programs, several additional tables have been prepared to show participation

Residencies by Specialty

Table 7 follows the format for last year in that the list of residency training programs in hospitals precedes the list of programs in preventive medicine which are not conducted primarily in hospitals The number of approved programs increased from 5,433 for last year to 5,686 for 1959-1960 The total number of residency positions offered decreased from 31,818 to 31,733 Of this number, 13,302 or 42% were first-year positions

Training was offered in 28 specialties and subspecialties, including general practice Sixty-four per cent of the available positions were offered by the five major specialties of surgery, with 5,872, internal medicine, with 5,525, psychiatry, with 3,658, pathology with 2,638, and obstetrics-gynecology with 2,497 positions

Of those specialties offering at least 100 total positions, the highest percentage of occupancy was 94% shared by obstetrics-gynecology and ophthalmology, with surgery next at 93%, and dermatology, orthopedic surgery, and otolarvngology tied at 92% Pediatrics and plastic surgery at 91% occupancy complete the list of those specialties with more than 90% of positions filled The least popular residencies among those specialties offering more than 100 total positions were, physical medicine and rehabilitation with 58% occupancy, pathology with 73% occupancy, and general practice with 74% positions filled

The over-all occupancy rate for all residencies offered was 87%, a gain of 3% over the previous year

Residencies, by Type of Hospital Control

Table 8 eliminates the programs in preventive medicine which are not conducted in hospitals and the percentage figures apply to only those residency programs in hospitals

Table 8 reveals that federal hospitals comprised 10% of the total and offered 15% of the positions, nonfederal governmental hospitals comprised 27% of the total and offered 37% of the positions Nongovernmental hospitals comprised 61% of the total, but because of their smaller size, generally, offered only 47% of the positions The proprietary hospitals were only 2% of the total and offered less than 1% of the available appointments Programs in the nonfederal government hospitals were 90% filled, in the nongovernmental hospitals were 86% filled, in the federal hospitals were 84% filled, and in the proprietary hospitals were only 79% filled The over-all percentage of filled residency positions in hospitals was 87%

In the federal group of hospitals, the 86 Veterans Administration Hospitals offered 66% of all positions in federal hospitals and filled 65% of all the federal residency positions which were filled This figure of 2,650 filled residency positions in Veterans Administration Hospitals is 10% of the total filled in the United States With the exception of the United States Air Force Hospitals, all federal hospitals filled over 80% of their positions Among the other groups of hospitals, city hospitals and hospital districts both filled 96% of the available positions and except for the two proprietary hospitals operated as partnerships and the Air Force Hospitals, state hospitals had the poorest record with 71% of positions filled Church controlled hospitals showed a gain from 77% filled the previous year to 82% filled this year, but this is largely due to a reduction in the total number of positions offered

TABLE 8 —Number of Residencies, by Type of Hospital Control, 1959 1960

			No of Residencies					
			First Yr Appointments			Total Appointments (All Yr)		
Control	No of Hospitals	No of Appr Programs	Filled Sept 1 1959	Vacant Sept 1 1959	Percentage Filled	Filled Sept 1 1959	Vacant Sept 1 1959	Percentage Filled
Federal								
U S Air Force	5	6	2	7	22	4	11	27
U S Army	14	101	230	27	89	655	92	88
U S Navy	8	80	112	11	91	369	23	94
U S Public Health Service	10	35	59	5	92	173	28	86
Veterans Administration	86	553	919	272	78	2 650	591	82
Other federal	10	45	50	13	79	255	31	89
Totals	133	822	1 402	335	81	4 106	776	84
Governmental (Nonfederal)								
State	185	667	1 955	305	81	4 966	660	71
County	69	318	825	70	92	1 880	198	91
City	79	439	1 253	96	93	3 071	227	96
City county	11	100	169	32	84	400	70	85
Hospital district	8	32	77	4	95	180	7	96
Totals	352	1 556	4 279	507	89	10 497	1 162	90
Nongovernmental Nonprofit								
Church operated and church related	296	1 074	1 600	324	83	3 244	707	82
Other nonprofit	501	2 151	4 144	554	88	9 535	1 402	87
Totals	797	3 225	5 744	878	87	12 779	2 109	86
Proprietary								
Individual	2	3	3	1	75	7	2	78
Partnership	2	4	1	6	14	1	12	8
Corporation	21	37	65	8	89	141	26	84
Totals	25	44	69	15	82	149	40	79
Grand Totals	1,307	5 647	11 494	1 735	87	27 531	4 087	87

Residencies, by Medical School Affiliation and Bed Capacity

For the first time this year, hospitals with approved residency programs have been divided not only by bed capacity but also by affiliation with medical schools as was done for internships Again, the programs in preventive medicine are not included in this Table 9

Table 9 also contains 45 programs which were listed as 'Other' because of the fact that they represented either the participation of several hospitals, represented large separate services or divisions of individual hospitals, or represented clinics or other groups carrying program approval but not being identified with control of specific numbers of beds in specific hospitals Except for these 45 instances which are actually not individual hospitals, the

figures are accurate for the remainder of the 1,307 hospitals

Fifty-two per cent, or 16,458 of the total positions offered are in hospitals of greater than 500 beds capacity Seven per cent, or 2,068 of the positions are in hospitals of less than 200 beds capacity

The 348 hospitals affiliated with medical schools constitute only 27% of the total hospitals with approved residency programs, and yet they offer 18,452, or 58%, of the positions Positions were 90% filled in the affiliated hospital group and 84% filled in the nonaffiliated hospital group Among both groups of hospitals, the percentage of positions filled was greatest in the hospitals of over 500 beds capacity While the nonaffiliated group of hospitals had a larger actual number of hospitals of over 500 beds than did the affiliated hospital group, this category of hospitals comprised only 19% of the total of nonaffiliated hospitals

TABLE 9 —Number of Residencies, by Medical School Affiliation and Bed Capacity, 1959 1960

Classification	No of Residencies			
	No of Hospitals	Filled Sept 1, 1959	Vacant Sept 1, 1959	Percentage Filled
Nonaffiliated				
Less than 200 beds	236	1 045	238	81
200-299	262	1 662	362	82
300 499	238	3 290	776	81
500 over	185	4,168	741	85
Other	38	777	117	87
Totals	959	10,932	2 234	84
Affiliated				
Less than 200 beds	54	675	110	86
200-299	59	1 448	219	87
300-499	95	3 413	452	88
500 over	133	10 494	1 055	91
Other	7	569	17	97
Totals	348	16 599	1 853	90
Grand Totals	1,307	27,531	4 087	87

Residencies by Census Region and State

Table 10 is a new inclusion this year for the study of those many groups interested in the distribution of residents in the various states Table 10 reveals there are 5,647 approved residency training programs in 1,307 hospitals As was true for internships, the middle Atlantic states of New Jersey, New York, and Pennsylvania offered 1,453 or 26% of the approved programs, offered 8,388 or 27% of 31,618 available positions, and secured 7,552 or 27% of the available residents

(Table 13 indicates the participation of the foreign physician in these programs)

South Dakota, which had only four approved programs in two hospitals, filled all seven of the positions offered With this exception, the most successful state was Maryland with 94% of positions filled The other states securing 90% or more of the candidates sought were Arizona, Colorado, District of Columbia, Florida, Louisiana, Massachusetts, New Jersey, New York, North Carolina, and Puerto Rico With the exception of North Dakota which filled only one of the seven positions offered, the least successful states were Maine with 52% occupancy, New Mexico with 56%, and Mississippi with 67% of the positions filled

Residency Stipends

As was done last year, the "Directory of Approved Residencies" lists the range of stipends, showing the minimum and maximum for each program as well as the degree of maintenance provided The questionnaire on which this report was based has yielded the information recorded in Table 11 for the 5,341 nonfederal and VA programs on which data were available This Table, like Table 6 for intern stipends, has a "blank" category for those programs whose data could not be analyzed because of the organization of the program There was a total of 5,341 programs of which 2,640 were in affiliated hospitals and 2,701 in nonaffiliated hospitals The Table reveals that 56 or only about 1% of the affiliated hospital programs paid $50 00 or less per resident per month, while none of the nonaffiliated hospital programs paid this small an amount For affiliated hospitals, 2,074 or 39% of the programs paid from $101 00 to $300 00 per month For the nonaffiliated group 2,202, or 41%, paid from $101 00 to $350 00 per month For the affiliated hospitals, there were four programs which paid over $600 00 per month, while 12 programs from the nonaffiliated hospitals paid this amount There was one program in each group which paid more than $950 00 per month

Data on maintenance in addition to stipends were available for 5,647 residency programs and indicate that 1,991 or 35% provided full maintenance, 1,265 or 22% provided partial maintenance, and 839 or 15% paid no maintenance An additional 625 or 11% provided full maintenance to the single resident and partial maintenance of one sort or another to the married resident In the "Directory of Approved Residencies" in this issue the stipend range is shown as well as the degree of maintenance provided

Last year, data were provided for the first time as the degree to which hospitals provide Blue Cross or some other form of hospitalization and also liability (malpractice) insurance to residents at no additional cost to the resident For the year from 1959 to 1960, both Blue Cross and liability insurance were provided for 1,158 or 21% of 5,647 programs Hospitalization only was provided by 980 or 17%, and liability insurance only was provided by 663 or 12% Fifty per cent or 2,846 of the programs provided neither type of additional benefit The total programs providing some type of hospitalization was accordingly 2,138 or 38% of the total, a figure 12% less than last year The total programs providing liability insurance was 1,821 or 32% of the programs, a figure 5% lower than last year

Of the total filled positions in hospitals, 19,553 or 71% were filled by married residents and 7,978 or

TABLE 10 —Number of Residencies by Census Region and State 1959 1960

Census Region and State	No of Appr Programs	No of Hospitals	No of Residencies: Filled Sept 1 1959	No of Residencies: Vacant Sept 1 1959	No of Residencies: Percentage Filled
New England					
Connecticut	110	32	537	83	87
Maine	17	4	22	20	52
Massachusetts	288	77	1 224	123	91
New Hampshire	32	2	63	19	76
Rhode Island	30	12	97	11	89
Vermont	41	6	95	15	86
Totals	448	133	2 036	271	88
Middle Atlantic					
New Jersey	141	56	440	52	90
New York	867	192	5 253	980	93
Pennsylvania	445	102	1 859	398	82
Totals	1 453	350	7 552	836	90
East North Central					
Illinois	395	68	1 454	217	87
Indiana	73	16	298	122	71
Michigan	231	54	1 393	191	88
Ohio	345	78	1 715	295	85
Wisconsin	108	26	456	94	83
Totals	1 082	242	5 316	919	85
West North Central					
Iowa	44	11	265	65	80
Kansas	42	11	255	49	84
Minnesota	115	23	711	127	85
Missouri	159	37	842	196	82
Nebraska	39	13	149	50	75
North Dakota	6	2	1	6	14
South Dakota	4	2	7		100
Totals	409	99	2 960	493	82
South Atlantic					
Delaware	17	5	51	12	81
District of Columbia	114	16	689	76	90
Florida	83	22	433	44	91
Georgia	108	20	428	93	82
Maryland	146	35	911	62	94
North Carolina	96	18	518	57	90
South Carolina	27	6	93	18	84
Virginia	108	28	380	99	79
West Virginia	36	16	108	31	78
Totals	734	166	3 611	492	88
East South Central					
Alabama	56	10	202	52	80
Kentucky	66	20	257	65	80
Mississippi	32	9	99	49	67
Tennessee	115	26	550	82	87
Totals	269	65	1 108	248	82
West South Central					
Arkansas	25	7	155	40	79
Louisiana	97	16	595	63	90
Oklahoma	52	8	191	26	88
Texas	237	38	1 078	158	87
Totals	412	69	2 019	287	88
Mountain					
Arizona	23	6	61	7	90
Colorado	102	19	490	42	92
New Mexico	14	5	31	24	56
Utah	41	9	155	15	91
Totals	180	39	737	88	89
Pacific					
California	457	97	2 161	354	86
Hawaii	23	8	98	15	87
Oregon	47	8	199	27	88
Washington	93	19	269	37	88
Totals	620	132	2 727	433	86
Territories and Possessions					
Canal Zone	6	1	18	4	82
Puerto Rico	34	11	147	16	90
Totals	40	12	165	20	89
Grand Totals	5 047	1 307	27 531	4 087	87

29% were filled by single residents To ascertain whether certain specialties were more attractive to married or single residents, the actual figures were secured for the number of married residents by specialty in each approved program The specialty with the lowest percentage appointed was general practice with 64% of the residents married Neurology and pediatrics each reported 65%, while pathology and pulmonary diseases reported 66% of the filled positions occupied by married residents It will be noted that in pulmonary diseases and general practice the foreign graduates filled a significant number of the positions Data are not available as to the number of married foreign graduates

Those specialties reporting 80% or more married residents on duty were orthopedic surgery with 80%, obstetrics with 81%, allergy and gastroenterology with 85% each, proctology with 89%, and pediatric allergy with 100%, inasmuch as all six of the filled positions were occupied by married residents With the exception of orthopedic surgery, those specialties with over 80% of filled positions occupied by married residents were in the more limited specialties with the fewest total number of positions available Orthopedic surgery was among the specialties with the lowest percentage of foreign physicians occupying filled positions Because of variable factors, it is not appropriate to conclude from these figures that marital status plays a significant role in choice of a specialty by residents in training

TABLE 11 —Monthly Residency Stipends 1959 1960

Beginning Stipend Dollars per month	Affiliated	Non Affiliated
Blank	170	231
0 50	56	
51 100	174	59
101 150	432	256
151 200	554	454
201 250	543	568
251 300	545	683
301 350	98	241
351 400	21	73
401-450	29	47
451 500	6	29
501 550	4	50
551-600	4	18
601-650	1	4
651 700	1	2
701 750	1	
751-800		1
801 850		2
851 900		
901 950		2
951 999	1	1
Total Hospitals	2 640	2 701

Foreign Medical Graduates

The Institute of International Education, through its publication *Open Doors 1960* has generously supplied data to the Council derived from the census taken on foreign physicians serving in approved graduate training programs in the United States

Table 12 reveals the distribution of foreign medical graduates serving as residents by specialty This Table reveals the actual number on duty and the

percentage these numbers represent of the total filled for each specialty in the United States In addition, there is a group of miscellaneous specialties reported to the IIE under titles difficult to include in the standard list, so this group of 191 is carried at the bottom of the Table under "miscellaneous" Of the 6,912 foreign physicians reported to the IIE as residents, 289 or 4 2% were specifically

TABLE 12 —Foreign Medical Graduates (Residents) by Specialty

Specialty	Foreign Physicians Serving as Residents	Percentage of Total Serving in U S (% of Column 5, Table 7)
Allergy	3	14
Anesthesiology	376	30
Cardiovascular Disease	47	41
Dermatology	30	10
Gastroenterology	9	17
General Practice	267	51
Internal Medicine	1 140	23
Neurological Surgery	80	23
Neurology	74	22
Obstetrics Gynecology		
Obstetrics Gynecology	140	23
Ophthalmology	71	10
Orthopedic Surgery	111	10
Otolaryngology	115	25
Pathology	677	35
Pediatrics	467	28
Pediatric Allergy	1	17
Physical Medicine	48	35
Plastic Surgery	24	22
Proctology	8	42
Psychiatry	566	19
Pulmonary Disease	156	65
Radiology	310	22
Surgery	1 401	26
Thoracic Surgery	59	33
Urology	142	22
Totals	6,720	24
Other than hospitals		
Aviation Medicine	1	6
Occup Med (In plant)		
Public Health		
Totals	1	2
Miscellaneous		
Bacteriology	3	
Cardiovascular Surgery	11	
Cancer	1	
Dentistry	11	
Endocrinology	16	
Nuclear Medicine	1	
Preventive Medicine	2	
Research	16	
Thor Card Research	2	
Unknown	118	
Infectious Disease	4	
Metabolism	3	
Surg Physiol	3	
Totals	191	
Grand Totals	6,912	25

indicated as having major responsibilities either in research or teaching This group was accordingly included in the total of foreign residents

The distribution of foreign physicians among the various specialties was similar to the general frequency distribution of positions available in that the largest total of foreign physicians, 1,401 were serving in surgery, the next largest was 1,140 in internal medicine, and these, in turn, followed by pathology, psychiatry, and obstetrics-gynecology On a percentage basis, the proportion of foreign physicians filling pulmonary disease residencies was greater than for any other specialty, being 65% of all the pulmonary disease residencies filled General practice was next most popular with 51% of the filled positions occupied by foreign physicians Only in dermatology, ophthalmology, and orthopedic surgery did foreign physicians fill as few as 10% of the positions

For the academic year from 1959 to 1960 there were 9,457 foreign physicians from 92 countries training in hospitals throughout the United States Of this group, 6,912 were reported as resident physicians, and 2,545 or 27% were reported as interns The total foreign physicians therefore increased 13% over the number reported in the previous year The IIE figures include 539 Canadian physicians training in the United States and do not include those American citizens who graduated from foreign medical schools To date, however, these figures are the most accurate available to the Council

The above publication *Open Doors 1960* listed for the first time the hospitals in each state accepting foreign physicians, giving the totals for each hospital and for each state These individual figures for hospitals have been included in the consolidated list of hospitals in this issue Six states accepted more than 500 foreign graduates with New York having 2,387 or 25% of all foreign physicians Ohio followed with 872 or 9%, Pennsylvania had 619 or 7%, Massachusetts had 573 or 6%, Illinois had 552 or 6%, and New Jersey had 502 or 5% of the total foreign physicians in the United States Nine hundred twenty-eight hospitals in 45 states, the District of Columbia, and Puerto Rico reported foreign physicians, and 15 hospitals reported more than 50 physicians on their staffs, nine of these being in New York City

As before, the Philippine Islands contributed 2,319 physicians for the largest single group, while 3,639 or 38 5% were from the Far East, 1,837 or 19 4% from Latin America, 1,714 or 18 1% from the Near and Middle East, and 1,543 or 16 3% from Europe

Table 13 reveals the distribution of foreign physicians in approved programs by census region and state, and indicates the total approved programs in each state, the total of all intern and resident positions filled in each state, the total foreign physicians serving either as interns or residents in each state, and then the percentage which these foreign physicians represent of all the filled positions While there were 44,198 available intern and resident positions, 37,784 of these positions or 85% of the total were filled Since 9,457 of the filled positions were occupied by foreign physicians, they accordingly constituted 25% of all interns and residents on duty during 1959 to 1960 Again it will be noted that the three middle Atlantic states of New Jersey, New York, and Pennsylvania showed 34% of their filled intern and resident positions occupied by foreign

physicians to lead the list New England was next with 31%, and the Pacific region was lowest with 5%, if Puerto Rico and the Canal Zone are excluded There is a rather wide variation from state to state, but the highest proportion of foreign physicians in filled internships and residencies was in West Virginia with 67% The very low proportions in some states are related in some instances to licensure or other legal requirements South Carolina reported none

It is expected the total of foreign physicians serving as interns and residents for the year from 1960 to 1961 will be somewhat reduced over previous years as the result of implementation of the policy requiring ECFMG certification after Dec 31, 1960 It has been estimated that possibly as many as 15% of foreign physicians who were in this country during 1959 to 1960 may be required to return to their homelands as a result of failing to secure ECFMG certification An increasing number of hospitals have either refused to accept the foreign graduate as a trainee or have established certain quotas within their house staff totals which may be filled by the foreign graduate It is the general feeling of informed authorities that the decrease in the total number of foreign graduates available for internships and residencies will be temporary This issue carries a section describing the ECFMG program

Hospital Autopsy Rates

Until this year, the Directory had carried autopsy percentages for only those hospitals having approved internship programs Since 40% of the hospitals with approved training programs do not have internships, it was felt that all hospitals should be included in the lists showing comparative autopsy performance Table 14 accordingly reveals the 20 federal and nonfederal hospitals having the highest rates as in past years It will be noted that for the federal hospitals, only 3 of the 20 have autopsy rates of less than 90%, for the nonfederal hospitals, none have less than 90%, and 12 have 100% rates These figures are somewhat misleading inasmuch as they apply to some institutions having a very low mortality For next year, hospitals will be selected which have a sufficiently greater mortality to produce meaningful comparative figures

The Council and all Review Committees consider the autopsy rate to be a useful indication of the interest of a hospital staff in medical education and scientific progress of medicine, and feel that the minimum acceptable autopsy rate of 25% described in the "Essentials' should be exceeded to an appreciable degree by any hospital hoping to maintain an approved training program

Other Graduate Trainees by Specialty

Table 15 reveals the other graduate trainees by specialty as reported in the questionnaire for 1959 The questionnaire asked for a report of those graduate trainees not serving as physicians in residency

TABLE 13 —Foreign Physicians in Approved Graduate Training Programs by Census Region and State, 1959 1960

Census Region and State	Total Intern and Resident Programs Approved	Total Intern and Resident Positions Filled	Total* Foreign Physicians Serving	Percentage of Foreign Physicians in Filled Positions
New England				
Connecticut	134	741	187	25
Maine	20	36	3	8
Massachusetts	293	1 611	573	36
New Hampshire	13	77	4	5
Rhode Island	37	161	72	45
Vermont	43	107	19	18
Totals	540	2 733	858	31
Middle Atlantic				
New Jersey	187	875	502	57
New York	1 040	6 991	2 387	34
Pennsylvania	522	2 499	619	25
Totals	1 749	10 365	3 508	34
East North Central				
Illinois	360	2 108	552	26
Indiana	91	394	10	3
Michigan	271	1 870	418	22
Ohio	412	2 360	872	37
Wisconsin	132	592	177	30
Totals	1 286	7 324	2 029	28
West North Central				
Iowa	92	343	53	15
Kansas	53	322	73	23
Minnesota	134	911	207	23
Missouri	194	1 157	408	35
Nebraska	49	196	23	12
North Dakota	9	14	6	43
South Dakota	7	25	11	44
Totals	498	2 968	781	26
South Atlantic				
Delaware	20	70	35	50
District of Columbia	128	923	215	23
Florida	105	624	120	19
Georgia	130	645	120	19
Maryland	183	1 197	437	36
North Carolina	125	687	71	10
South Carolina	34	177		
Virginia	134	563	113	20
West Virginia	46	177	118	67
Totals	905	5 063	1 229	25
East South Central				
Alabama	65	282	18	7
Kentucky	80	326	111	34
Mississippi	34	130	8	7
Tennessee	134	771	163	21
Totals	313	1 509	300	20
West South Central				
Arkansas	31	207	4	2
Louisiana	109	774	48	6
Oklahoma	61	275	28	10
Texas	270	1 386	228	17
Totals	474	2 642	308	12
Mountain				
Arizona	28	113	58	51
Colorado	118	641	144	23
Montana	1	4	3	75
New Mexico	15	36	1	3
Utah	53	245	29	12
Totals	215	1 039	235	23
Pacific				
California	518	3 004	67	2
Hawaii	27	161	31	19
Oregon	55	277	45	16
Washington	114	446	63	14
Totals	714	3 888	206	5
Territories and Possessions				
Canal Zone	7	33		
Puerto Rico	43	220	3	1
Totals	50	253	3	
Grand Totals	6 744	37 784	9 457	25

* Does not include American graduates of foreign medical schools but does include 39 from Canada

training programs These trainees accordingly may be research fellows, teaching fellows, clinical trainees, or other types of physicians securing special training which may lead toward specialization and toward specialty board certification

TABLE 14 —Hospitals with Highest Autopsy Rates

		%
	Federal	
1	U S Naval Hospital Great Lakes, Ill	98
2	U S Naval Hospital Jacksonville Fla	97
3	Veterans Administration Hospital, Albuquerque N Mex	96
4	Veterans Administration Hospital, Coral Gables Fla	94
5	National Institutes of Health Clinical Center Bethesda, Md	94
6	U S Naval Hospital Oceanside, Calif	93
7	U S Naval Hospital Bremerton, Wash	93
8	U S Naval Hospital Oakland, Calif	92
9	Veterans Administration Hospital Denver, Colo	92
10	U S Naval Hospital New York N Y	92
11	Veterans Administration Hospital, Seattle, Wash	92
12	Veterans Administration Hospital Downey, Ill	91
13	U S Naval Hospital Bethesda, Md	90
14	U S Air Force Hospital San Antonio Texas	90
15	Veterans Administration Hospital Salt Lake City, Utah	90
16	Veterans Administration Hospital White River Junction, Vt	90
17	Madigan General Hospital, Tacoma, Wash	90
18	Veterans Administration Hospital Madison Wis	89
19	Brooke General Hospital San Antonio, Texas	88
20	Veterans Administration Hospital Portland Ore	88
	Nonfederal	
1	Langley Porter Neuropsychiatric Institute San Francisco	100
2	Shriners Hospital for Crippled Children, San Francisco	100
3	Marie D Carter Memorial Hospital, Indianapolis Ind	100
4	Shriners Hospitals for Crippled Children Lexington, Ky	100
5	Nebraska Psychiatric Institute Omaha Neb	100
6	Roswell Park Memorial Institute Buffalo N Y	100
7	Jewish Chronic Disease Hospital, Brooklyn N Y	100
8	St Charles Hospital Brooklyn, N Y	100
9	Columbus Psychiatric Institute and Hospital Columbus, Ohio	100
	Western Psychiatric Institute and Clinic, Pittsburgh, Pa	100
	Shriners Hospitals for Crippled Children, Spokane Wash	100
	Children s Hospital, Washington, D C	100
13	Columbia Hospital for Women and Lying In Asylum, Washington, D C	98
14	University of Florida Gainesville Florida	94
15	Los Alamos Medical Center, Los Alamos N Mex	94
16	Children s Orthopedic Hospital Seattle Wash	94
17	Virginia Mason Hospital Seattle Wash	94
18	Dr I Gonzalez Martinez Oncologic Hospital, Santurce, P R	94
19	Rockford Memorial Hospital, Rockford Ill	93
20	Milwaukee Children's Hospital, Milwaukee, Wis	93

Table 15 reveals that a total of 3,505 physicians were receiving specialty training in some capacity other than as residents This figure added to the total of 27,531 resident positions filled indicates that there are 31,036 pursuing specialty training in hospitals and indicates that 11% of this total occupy positions other than as residents Using this same method of comparison by specialty, it is observed that internal medicine had the predominant number of other trainees besides residents, and the 1,536 such physicians constituted 24% of all those receiving specialty training in internal medicine By contrast, only 7% of all the trainees in surgery were given appointments other than as residents For pediatrics the comparable figure was 13%, for psychiatry 10%, for pathology 9%, and for obstetrics-gynecology 4% Study of the four subspecialties of internal medicine reveals that the other graduate trainees constitute 46% of the total for allergy, 35% for cardiovascular diseases, 24% of the total for gastroenterology, but only 11% of the total for pulmonary diseases. In contrast with psychiatry's figure of 10%, 30% of the trainees in neurology were appointed in some capacity other than as residents The only specialty for which no trainees were appointed other than as residents was proctology

Family Practice Programs

The "Directory of Approved Internships" lists three hospitals offering family practice programs for the year from 1961 to 1962 They were listed by the National Intern Matching Program as if they were internships One was organized so late that only two of them are reported in the statistical tables, and they show seven positions offered with none filled The three programs are located at Indiana University Medical Center, University of Kansas Medical Center, and Baltimore City Hospital The program directors anticipate fully satisfactory candidates will be available for the year from 1961 to 1962

During the current year, five different institutions have indicated a desire to inaugurate this program, if tentatively approved as pilot programs, they will participate in the NIMP matching for 1961 to 1962 appointments This deliberate establishment of pilot programs is in accord with instructions from the House of Delegates at the time this new program was approved in June, 1959 Hospitals are being selected which represent a variety of different

TABLE 15 —Other Graduate Trainees by Specialty.

Specialty	No of Trainees
Allergy	18
Anesthesiology	68
Cardiovascular Disease	78
Dermatology	34
Gastroenterology	17
General Practice	69
Internal Medicine	1,536
Neurological Surgery	18
Neurology	144
Obstetrics	1
Gynecology	1
Obstetrics Gynecology	93
Ophthalmology	59
Orthopedic Surgery	31
Otolaryngology	21
Pathology	200
Pediatrics	215
Pediatric Allergy	6
Physical Medicine	18
Plastic Surgery	6
Proctology	
Psychiatry	311
Pulmonary Disease	90
Radiology	123
Surgery	305
Thoracic Surgery	22
Urology	17
Totals	3,405

situations involving varying degrees of affiliation with medical centers, but all having adequate full-time and part-time staffs to give these programs more than the ordinary degree of supervision during the early years These programs are being added to the existing programs at each institution and are in no sense being made a substitute for existing programs The policy is that trainees in these programs will be carefully supervised and the programs

will be carefully organized and analyzed before determining the degree to which they may replace existing programs

To secure information regarding interest in this program and the possible degree to which such programs might substitute for existing programs, four questions were inserted in the questionnaire upon which this report is based The question asked was 'If a fully satisfactory two-year program in family practice was developed at a furture date (emphasis on medicine, pediatrics, trauma, acute medical and surgical emergencies, elective obstetrics, and beginning immediately after medical school graduation), would you be interested in (*a*) adding it to your existing program or programs? (*b*) substituting it for your one year rotating internship? (*c*) substituting it for your general practice residency? (*d*) discontinuing certain one to two year residency programs?' Because the existence and the specific nature of the program were not fully appreciated by a number of program directors, the questions were not answered in a large number of cases To each of the four questions, the nonaffiliated hospitals made the preponderant number of replies The nonaffiliated hospitals gave affirmative replies to question (*a*) for 55% of 691 hospitals, to question (*b*) affirmative replies were received from 23% of 526 hospitals, to question (*c*) affirmative replies were received from only 22% of 433 hospitals, and for question (*d*) affirmative replies constituted only 10% of the answers of 449 hospitals This indicated that the preponderance of those hospitals sufficiently concerned to make reply to this question did not wish to discontinue their general practice residency programs or their one to two year residency programs, were not strikingly enthusiastic about substituting the family practice program for an existing one year rotating internship but were definitely interested in adding a program to the existing programs in those nonaffiliated hospitals

For the affiliated group of hospitals, questions (*c*) and (*d*) were of less interest than the answers to questions (*a*) and (*b*) To question (*a*), 39% of 254 hospitals indicated an interest in adding a family practice program to their existing programs To question (*b*), only 10% of 183 hospitals indicated an interest in substituting this program for the existing one year rotating internship Since large numbers of hospitals made no reply to this question, the answers cannot be regarded as indicating more than that the nonaffiliated hospitals are more interested in new programs and changing existing programs than are the affiliated hospitals

The two-year program in family practice cannot be considered generally available to all hospitals until the existing pilot programs are carefully studied and until "Essentials' can be prepared and approved by the House of Delegates The programs will be available to candidates through the NIMP, since they embrace the two-year period ordinarily encompassed by a one-year internship and a one-year residency At this time they are being called neither internships nor residencies since this program is distinctly different from both in certain respects

TABLE 16 —Status of Internships and Residency Programs in the U S A

	Internships							Residencies						
			Filled by	Filled by	Filled Federal Services					Filled by	Filled by	Filled Federal Services		
	Total Offered	Total Filled	U S Grads	Foreign Grads	V A	Other	Total Vacant	Total Offered	Total Filled	U S Grads	Foreign Grads	V A	Other	Total Vacant
1959	12 580	10 253	7 708	2 545	53	584	2 327	31,733	27 590	20 619	6 912	2 650	1 456	4 143
1958	12 469	10 352	8 037	2 315	25	567	2 117	31 818	26 758	20 716	6 042	2 453	1 267	5 060
1957	12 325	10 198	8 119	2 079	48	566	2 127	30 595	24 976	19 433	5 543	2 403	1 049	5 619
1956	11 891	9 893	7 905	1 988	58	532	2 002	28 528	23 012	18 259	4 753	2 304	1 276	5 516
1955	11 616	9 603	7 744	1 859	53	493	2 013	26 516	21 425	17 251	4 174	2 353	624	5 091
1954	11 048	9 066	7 305	1 761	88	470	1 982	25 486	20 494	17 219	3 275	2 252	657	4 992
1953	10 542	8 275	6 488	1 787	88	433	2 267	23 630	18 619	14 817	3 802	2 072	639	5 011
1952	10 548	7 645	6 292	1 353	67	393	2 903	22 292	16 867	13 832	3 035	2 021	768	5 425
1951	10 044	7 866	6 750	1 116	71	472	2 178	20 645	15 851	13 618	2 233	2 120	761	4 794
1950	9 370	7 030	6 308	722		435	2 340	19 364	14 495	13 145	1 350			4 869
1949	9 194	7 313					1 811	18 669	17 490		*			1 179
1948	9 027	7 248					1 779	17 293						
1947	8 683	6 902					1 781	15 172						
1946	8 584							12 003				*†		
1945	8 429							8 930						
WW II														
1941	8 182							5,256						

* U S Informational and Exchange Act of 1948 effective July 1949
† P L 293 Jan 3 1946 Authorizing Residency Programs in V A

Projection for the Future

Last year a chart was prepared which showed the expansion in graduate programs which had occurred following World War II, and included the proportion of those programs supported by the federal government and also the positions filled by foreign medical graduates The data on which this chart was based are reproduced in Table 16, entitled "Status of Internship and Residency Programs in the United States'

The actual performance figures are given insofar as they are known, for 1941, and from 1945 through the year 1959 to 1960 This Table includes not only all positions in hospitals, but also the preventive

medicine programs and positions which are not conducted in hospitals The projected increase for residency positions offered for 1959 and shown in last year's chart did not occur since the total was 31,733, a figure of 85 less in number of positions than for 1958-1959 Of the total positions, 87% were filled Seventy-five per cent of those filled were occupied by American graduates, while 25% were foreign physicians Of the total of 27,590 positions filled, 2,650 or 9 6% were in the Veterans Administration and 1,456 or 5% were in other federal hospitals Thirteen per cent or 4,143 of the available residency positions were vacant

Intern positions available for 1959 to 1960 increased by 111 over the previous year, and of the 12,580 available positions, 10,253 or 82% were filled Seventy-five per cent or 7,708, of the filled positions were occupied by American graduates and 25% by foreign physicians Only 55 or 0 5% of the filled positions were in the Veterans Administration, while 584, or 5 7% were in other federal hospitals Eighteen per cent or 2,327 of the available internships were vacant

It would appear that the total number of graduate training programs available in the United States is beginning to level off While the various Review Committees are becoming increasingly critical of training programs not conforming to the established standards, other hospitals are continually applying for approval of new programs or increase in size of existing programs because of the changes in construction now occurring in many hospitals throughout the nation

Table 17 reveals the relationship between hospitals with training programs and the beds they represent with respect to the total number of hospitals and total number of beds as reported by the American Hospital Association for the year from 1959 to 1960 There is a total of 1,438 hospitals having approved training programs, representing 21% of the 6,845 hospitals in the United States listed by the American Hospital Association These 1,438 hospitals with approved programs represent 812,149 beds or exactly 50% of the 1,612,822 total hospital beds in the United States

The hospitals with approved training programs which have major medical school affiliation number 226, or 3%, of the nation's total, and represent 9% of the total hospital beds Those hospitals with approved training programs but limited medical school affiliation total 124, or 2%, of the total hospitals in the nation, and represent 5% of the total beds The 1,088 hospitals which have approved graduate training programs but no medical school affiliation represent 76% of the 1,438 hospitals having approved programs, however, they represent only 16% of all the hospitals in the nation and they account for 36% of the total hospital beds in the nation It is apparent therefore that in only 21% of the hospitals and in only 50% of the beds of the nation will patients receive hospital medical care in an academic environment created by the presence of approved training programs Medical care in the other 800,672 beds of 5,407 hospitals is therefore delivered without the advantages of the presence of intern or resident training programs

The nation will never produce enough physicians nor can it possibly import enough foreign physicians to support approved training programs for however many additional hospitals might desire them In the period ahead, it is quite likely that the competition between hospitals for approved training programs will be decided largely on a basis of the quality of the training programs The total number of hospitals and programs approved for training may actually decrease as a result of the consequent recruitment failure of the hospitals with the least attractive programs

The questionnaire for this annual report sought information on the number of hospitals with approved training programs which also offered employment to medical students for extracurricular duties relating to service to patients Of the 1,438

TABLE 17 —Relation of Training Programs to U S Hospital Beds

			Hospital Beds	
	No	% of Total	No	% of Total
Hospitals with Approved Programs				
Major Medical School Affiliation	226	3	141,016	9
Limited Medical School Affiliation	124	2	87,091	5
No Medical School Affiliation	1 088	16	584,042	36
Total	1,438	21	812,149	50
Hospitals without Approved Training Programs	5,407	79	800 673	50
Grand Total	6,845	100	1 612,822	100

hospitals with approved programs, maintenance, pay only, or both, were offered by 500 or 46% of the 1,088 hospitals not affiliated with medical schools For this group of hospitals, 267 or 25% offered both pay and maintenance Of the 266 hospitals with major medical school affiliation, 102 or 45% offered similar support, while 68 or 55% of those with limited affiliation offered such employment Thus, 670 or 47% of the 1,438 hospitals offered extracurricular employment to medical students A figure is not available for the extent of this practice in hospitals without approved training programs

The Council and the various Review Committees are faced continually with the problem of the relationship of approved training programs to the service needs of hospitals When the service component predominates over the education component of any training program, adverse action is taken by the Council or appropriate Committee The employment of medical students is one approach to the service needs of hospitals with approved training programs While it is clear that this practice provides an important supplement to the income of the medical student, the Council has shown continuing concern over the effect of this noncurricular activity on the academic accomplishment of the student, as well as on the future status of the approved training programs in such hospitals

Consolidated List of Hospitals

With Approved Graduate Training Programs

Council on Medical Education and Hospitals of the American Medical Association

Revised to Sept 1, 1960

Hospitals 1,438 Internship Programs 1 097 Residency Programs 5 647

This consolidated list is a new format from previous years and gives general basic information about all hospitals which was formerly available only for hospitals with approved internship programs

All hospitals are listed alphabetically by state and city, and their proper names and addresses are included Medical school affiliation is shown in a special column and the code for identifying the medical schools appears on page 625 at the end of this list

Participation by the hospital in the clinical clerkship program of a medical school is indicated by M or L preceding the code number for the school M signifies that the hospital is a major unit in the teaching program of the medical school, while L indicates the hospital is used to a limited extent in the school s teaching program

The relationship of the hospital to the medical school is further indicated by two other symbols which follow the code number for the school The symbol × signifies ownership of the hospital by the medical school and the symbol # signifies that while the school does not own the hospital it has authority for all staff appointments in the hospital

The administrative control of the hospital is indicated in the special column whose abbreviations are spelled out on page 625

Footnotes provide additional information about appointment procedures, employment policies, and other matters

Footnote [1]—appointments are restricted to men only

Footnote [2]—U S citizenship is a requirement for appointment

Footnote [3]—foreign medical graduates are not eligible for appointment

Footnote [4]—dental internships are available

Footnote [5]—dental residencies are available

Footnote [6]—hospital offers employment to medical students for non curricular services

Footnote [7]—two-year family practice program

The total number of available beds and autopsy percentages are shown for each hospital

The number of foreign physicians serving in each hospital for 1959-1960 is shown as a total figure which does not distinguish between interns and residents This figure was obtained from the annual census of the Institute of International Education and does not include American graduates of foreign medical schools

For each hospital, all the types of internships and residencies are listed alphabetically The total number of positions offered is shown for all internships and all residencies in each hospital as a reflection of the training potential for each hospital Some of these positions represent duplications in those situations where several hospitals participate in combined training programs

Specific details for internships and for residency programs will be found in separate lists in this issue The general details in this consolidated list, together with the specific details about each approved training program in the internship and residency lists, provide a much more complete figure for study by the candidate for graduate training than has been available in the past Further details about the character of these approved training programs must be secured directly from the hospitals of the candidate s choice All candidates should familiarize themselves with the standards contained in the Essentials of an Approved Internship and Essentials of Approved Residencies when determining their choices of hospitals for training

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign Hon Staff	Positions Offered	Approved Programs
ALABAMA								
Birmingham								
Birmingham Baptist Hospital 708 Tuscaloosa Ave 11		Church	6	310	39		12 Int 7 Res	Rotating Path Rad
Carraway Methodist Hospital 2506 16th Ave N 4		Church	7 5	256	24		9 Int 15 Res	Rotating Gen Pract, OBG Path Surg Urol
Children s Hospital 712 S 20th St 5		NPCorp		65	45		9 Res	Ped
Crippled Children s Hospital 620 S 19th St 3	L 10	Church	5 6	100	50	2	4 Res	Ortho Surg Psych
St Vincent Hospital 2701 9th Court South		Church	2 3 6	200	39		8 Int	Rotating
University Hospital and Hillman Clinic 619 S 19th St 3	M 10X	State	7 4 5 6	600	46	6	55 Int 150 Res	Rotating St Med St Ped St Path Anes Derm Int Med Neuro Surg OBG Ophth Ortho Surg Otol Path Ped Psych Rad, Surg, Thor Surg Urol
Veterans Administration Hospital 700 S 19th St 3	M 10	VA	2	440	6	2	36 Res	Int Med Ophth Ortho Surg Otol Path Psych Rad Surg Urol
Fairfield								
Lloyd Noland Hospital P O Box 538		NPCorp	6	226	47	2	14 Int 28 Res	Rotating Anes Derm Int Med OBG, Ortho Surg Path Ped Surg
Mobile								
Mobile General Hospital 850 St Anthony St 16		CyCo		247	60	6	15 Int 20 Res	Rotating Int Med Ortho Surg Path Ped Surg
Montgomery								
U S Air Force Hospital Maxwell Air Force Base		Air Force	1 2	400	73		4 Res	Gen Pract
Tuskegee								
Veterans Administration Hospital		VA	4 6	1 920	68		25 Res	Int Med Ophth Phys Med Psych Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
ARIZONA								
Phoenix								
Good Samaritan Hospital 1033 E McDowell Rd		Church	6	410	47	8	18 Int 13 Res	Rotating Gen Pract, OBG Path, Surg
Maricopa County General Hospital 3433 W Durango St		County	6	423	45	19	12 Int 37 Res	Rotating Gen Pract, Int Med, OBG, Path, Ped, Pul Dis, Surg
St Joseph's Hospital 350 W Thomas Rd		Church	6	325	77	2	15 Int 15 Res	Rotating Int Med Obg, Path Ped, Surg
Tucson								
Pima County General Hospital 2900 S 16th Ave		County		161	55	8	9 Res	Int Med Surg
St Mary's Hospital St Mary's Rd		Church	6	305	45	8	9 Int 14 Res	Rotating Gen Pract Int Med Surg
Tucson Medical Center Grant Rd and Beverly Blvd		NPCorp		337	52	13	8 Int 7 Res	Rotating Int Med, Surg
ARKANSAS								
Little Rock								
Arkansas Baptist Hospital 1700 W 13th St		Church	6	366	29	2	16 Int 6 Res	Rotating Path Surg
Arkansas Children's Hospital 804 Wolfe St		NPCorp	6	67	24		2 Res	Ortho Surg
Arkansas State Hospital West Markham & Elm	I 11	State	4 6	5,175	21		6 Res	Psych
St Vincent Infirmary Markham St & University Ave		Church	6	315	36	2	12 Int 8 Res	Rotating Anes
University Hospital 1301 W Markham St	M 11	State	6	266	65		33 Int 107 Res	Rotating Mixed, St Med St Surg, St Ped, St Path, St Ob Gyn Anes, Derm Gen Pract, Int Med, Obg, Ophth, Ortho Surg, Path Ped Psych, Rad, Surg Urol
Veterans Administration Hospital 500 E Roosevelt Rd	M 11	VA	6	171	80		30 Res	Derm Int Med Ortho Surg, Path, Surg
North Little Rock								
Veterans Administration Hospital		VA	6	2,062	74		28 Res	Path Psych
CALIFORNIA								
Arlington								
General Hospital of Riverside County 9851 Magnolia Ave		County		342	53	3	12 Int 14 Res	Rotating Gen Pract Int Med Surg, Urol
Bakersfield								
Kern County General Hospital 1830 Flower St		County		619	57	3	12 Int 35 Res	Rotating Gen Pract, Int Med Obg Path Ped, Surg, Urol
Berkeley								
Herrick Memorial Hospital 2001 Dwight Way 4		NPCorp		253	61	1	6 Int 18 Res	Rotating Int Med Obg, Path Psych, Surg
State of California Dept of Public Health 2151 Berkeley Way							15 Res	Public Health
Burbank								
St Joseph Hospital 501 S Buena Vista St		Church		250	35		4 Res	Path
Camarillo								
Camarillo State Hospital Box A		State	2 6	6,281	49		15 Res	Psych
Compton								
Compton Sanitarium 820 W Compton Blvd		Corp		115	17		4 Res	Psych
Duarte								
City of Hope Medical Center 1500 E Duarte Rd		NPCorp	2	176	81		16 Res	Card Dis Int Med, Path Pul Dis, Rad, Surg, Thor Surg
Eldridge								
Sonoma State Hospital Arnold Dr		State	6	3,850	88		4 Res	Psych
Fort Ord								
U S Army Hospital		Army					Res	Public Health
Fresno								
General Hospital of Fresno County 4175 E Ventura Ave 2		County	6	705	48		18 Int 25 Res	Rotating Int Med, Obg Ophth, Ped, Surg
Glendale								
Glendale Sanitarium and Hospital 1509 E Wilson Ave 6		Church		292	54		12 Int 10 Res	Rotating Int Med Obg, Path
Imola								
Napa State Hospital Box A		State	2				6 Res	Psych
Inglewood								
Daniel Freeman Memorial Hospital 333 N Prairie Ave 1		Church		225	48		1 Res	Path
La Jolla								
Scripps Clinic and Research Foundation 176 Prospect St		NPCorp		45	90		7 Res	Allergy Int Med
Loma Linda								
Loma Linda Sanitarium and Hospital 11105 Anderson St	I 12X	Church		160	65	2	10 Int 11 Res	Rotating Anes Path
Long Beach								
Memorial Hospital of Long Beach 1101 Chestnut Ave, 13		NPCorp	6	316	33		15 Int 15 Res	Rotating Int Med Obg Path, Ped, Rad, Surg
St Mary's Long Beach Hospital 509 E 10th St, 13		Church		272	50	3	6 Int 6 Res	Rotating Gen Pract Path
Veterans Administration Hospital 5901 E Seventh St, 4		VA	2 4 6	1,500	79	1	80 Res	Allergy, Card Dis Derm Gastro Int Med Neuro Surg, Neur Ophth Ortho Surg, Path, Psych, Rad, Surg, Urol
Los Angeles								
California Babies and Children's Hospital 1415 S Grand Ave 15		NPCorp		28	50		3 Res	Ped
California Hospital 1414 S Hope St 15		Church	6	304	55		8 Int 18 Res	Rotating Obg, Path, Rad, Surg
Cedars of Lebanon Hospital 1833 Fountain Ave, 29		NPCorp	6	479	51		16 Int 48 Res	Rotating Int Med, Obg, Path, Ped Rad Surg
Children's Hospital 4611 Sunset Blvd 27	L 14	NPCorp	6	220	91	1	4 Int 32 Res	St Ped Ortho Surg Path, Ped

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
CALIFORNIA, Los Angeles—Continued								
Hospital of the Good Samaritan 1212 Shatto St 17		Church	6	458	41		8 Int 19 Res	Rotating Int Med Obg Path Pul Dis Rad Surg
Kaiser Foundation Hospital 4867 Sunset Blvd 27		NPCorp		246	61		11 Res	Obg Urol
Los Angeles County Hospital 1200 N State St 33	M 12 14	County	2 4 5 6	2 717	41		160 Int 252 Res	Rotating St Med Anes Card Dis Derm Int Med Neuro Surg Neuro Obg Ophth Ortho Surg Otol Path Ped Phys Med Psych Pul Dis Rad Surg Urol
Los Angeles Eye and Ear Hospital 400 S Lucas Ave 17		NPCorp	3	21	0		8 Res	Ophth Otol
Mount Sinai Hospital and Clinic 8720 Beverly Blvd 48		NPCorp		172	44		7 Res	Path Psych
Orthopaedic Hospital 2400 S Flower St 7	M 14	NPCorp		75	67	1	9 Res	Ortho Surg
Presbyterian Hospital-Olmsted Memorial 1322 N Vermont Ave 27		Church	1 6	284	39		10 Int 2 Res	Rotating Int Med Obg
Queen of Angels Hospital 2301 Belleevue Ave 26		Church		421	50		16 Int 25 Res	Rotating Int Med Obg Path Ped Proct Rad Surg
St Vincent's Hospital 2131 W 3rd St 57		Church	6	300	34	2	6 Int 5 Res	Rotating Int Med Path Surg
Santa Fe Coast Lines Hospital 610 S St Louis St 23		NPCorp	1 6	196	52		9 Int 3 Res	Rotating Surg
Shriners Hospital for Crippled Children Los Angeles Unit 2160 Geneva St 5		NPCorp		60			2 Res	Ortho Surg
University of California Hospital 1633 LeConte Ave 24	M 13	NPCorp		322	85	10	28 Int 138 Res	St Med St Surg St Ped St Path Anes Derm Int Med Neuro Surg Neur Obg Ophth Ortho Surg Otol Ped Allergy Path Ped Phys Med Plas Surg Psych Rad Surg Urol
Veteran Administration Hospital Wilshire and Sawtelle Blvds 2	M 13	VA	2 4 5 6	3 601	80		30 Int 204 Res	Rotating St Med Anes Card Dis Derm Gastro Int Med Neuro Surg Neur Ophth Ortho Surg Otol Path Phy Med Plas Surg Psych Rad Surg Thor Surg Urol
White Memorial Hospital 1720 Brooklyn Ave 33	M 12X	Church		243	74	5	15 Int 73 Res	Rotating Ane Derm Int Med Neuro Surg Neur Obg Ophth Ortho Surg Otol Path Ped Phys Med Proct Rad Surg Urol
Martinez								
Contra Costa County Hospital 2500 Alhambra Ave		County	2	441	67		10 Res	Gen Pract
Modesto								
Stanislaus County Hospital 830 Scenic Dr		County	2	400	25		9 Res	Gen Pract
Murphys								
Bret Harte Sanatorium		County		108	14		1 Res	Pul Dis
Norwalk								
Metropolitan State Hospital 11400 S Norwalk Blvd		State		4 353	30		20 Res	Psych
Oakland								
Children Hospital of the East Bay 51st and Grove Sts 9	I 16	NPCorp	5	142	85	1	14 Res	Ortho Surg Path Ped Thor Surg
Highland-Alameda County Hospital 2701 14th Ave 6		County	2 4 5	475	56		34 Int 66 Res	Rotating Ane Int Med Obg Ophth Ortho Surg Path, Ped Rad Surg Thor Surg Urol
Kaiser Foundation Hospital 280 W MacArthur Blvd 19		NPCorp		250	55	13	35 Res	Gen Pract Int Med Obg Path Ped Surg
Samuel Merritt Hospital Hawthorne Ave and Webster 9	I 16	NPCorp	3	247	65		4 Res	Ortho Surg Path Surg
U S Naval Hospital 8750 Mountain Blvd 14		Navy	4 6	1 150	92		18 Int 57 Res	Rotating Anes Int Med Obg Ophth Ortho Surg Otol, Path Ped Psych Rad Surg Urol
Veterans Administration Hospital 13th and Harrison Sts 12		VA	2	712	77		25 Res	Int Med Neur Path Surg
Oceanside								
U S Naval Hospital Camp Pendleton		Navy	1 6	1 004	93		10 Int	Rotating
Orange								
Orange County General Hospital 101 Placentia Ave		County	3 4 5	592	69		26 Int 17 Res	Rotating Int Med Obg Path Rad Surg
Palo Alto								
Palo Alto-Stanford Hospital Center 300 Pasteur Dr	M 15X	NPCorp	6	351	51		13 Int 199 Res	St Med St Surg Anes Derm Int Med Neur Obg, Ortho Surg Otol, Path Ped Psych Rad Surg
Pasadena								
Collis P and Howard Huntington Memorial Hospital 100 Congress St 2		NPCorp		361	54		9 Int 16 Res	Rotating Int Med Neuro Surg, Path Plas Surg Rad Surg
Patton								
Patton State Hospital Highland Ave	I 12	State	6	4 388	37		10 Res	Psych
Pomona								
Pacific State Hospital Box 100		State	2 6	3 000	83		5 Res	Psych
Redwood City								
Sequoia Hospital Whipple and Alameda		Dist	2 3	215	49		1 Res	Path
Sacramento								
Mercy Hospital 4001 J St 19		Church		307	83		4 Res	Path
Sacramento County Hospital 2315 Stockton Blvd 17	L-16	County	2	801	46		26 Int 16 Res	Rotating Gen Pract, Path
Sutter Community Hospitals 28th and L and 52nd and F		NPCorp	1 2 3	435	26		2 Res	Rad
Salinas								
Monterey County Hospital P O Box 1611		County	2	388	75		10 Res	Gen Pract
San Bernardino								
San Bernardino County Charity Hospital 780 E Gilbert St	L-12	County	1 2	419	40		16 Int 11 Res	Rotating Int Med Path Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
CALIFORNIA—Continued								
San Diego								
Donald N Sharpe Memorial Community Hospital 7901 Frost St 11		Church	6	191	80		2 Res	Path
Mercy Hospital Hillcrest Dr 3		Church	6	322	61		12 Int 16 Res	Rotating Int Med Obg Path Surg
San Diego County General Hospital North End of Front Street 3		County		616	18		20 Int 34 Res	Rotating Int Med Obg Ortho Surg, Path Ped Rad, Surg, Urol
U S Naval Hospital Park Blvd 31		Navy	2 4-5 6	1 900	86		24 Int 66 Res	Rotating Anes Card Dis Derm Int Med Obg Ophth Otol, Path Ped Rad Surg Thor Surg Urol
San Francisco								
Children's Hospital 3700 California St, 18	L 16	NPCorp	6	251	58		6 Int 17 Res	Rotating Anes Int Med, Obg Ortho Surg, Path Ped, Rad
Franklin Hospital 14th and Noe Streets 14	I 16	NPCorp	3 6	212	55	2	6 Int 9 Res	Rotating Int Med Neuro Surg Ortho Surg Path Plas Surg
French Hospital 4131 Geary Blvd 18		NPCorp	6	193	39	3	10 Int 9 Res	Mixed Int Med Path Surg
Headquarters 6th Army Presidio		Army					2 Res	Public Health
Kaiser Foundation Hospital 2425 Geary Blvd 15		NPCorp		222	71		20 Int 31 Res	Rotating Allergy Anes, Int Med Obg Path Ped Psych Rad Surg
Langley Porter Neuropsychiatric Institute Parnassus and First Ave 22	M 16#	State	2 3 6	108	100		40 Res	Psych
Letterman General Hospital Presidio 29		Army	3 4 6	914	81		24 Int 85 Res	Rotating Card Dis Derm Gastro Int Med Neur Obg Ophth Ortho Surg Path Ped, Phys Med Psych, Rad Surg Thor Surg Urol
Mary's Help Hospital 145 Guerrero St 3		Church	6	178	45	2	6 Int 9 Res	Rotating Int Med Obg Surg
Mount Zion Hospital 1600 Divisadero St 15		NPCorp	6	345	71	3	18 Int 44 Res	Rotating Int Med Obg Path Ped Psych Rad Surg
Presbyterian Medical Center Clay and Webster Streets 15		NPCorp	6	237	70		12 Int 50 Res	Rotating Int Med Obg Ophth Ortho Surg Path Psych, Surg Urol
St Francis Memorial Hospital 900 Hyde St 9		NPCorp		332	46		9 Res	Obg Path Plas Surg Psych
St Joseph's Hospital Buena Vista Ave 17		Church	6	215	35	3	6 Int 10 Res	Rotating Anes Obg Ortho Surg Surg
St Luke's Hospital 1580 Valencia St 10		Church	6	235	55	2	12 Int 19 Res	Rotating Int Med Obg, Path Ped Surg
St Mary's Hospital 2200 Hayes St, 17		Church		371	70	2	15 Int 36 Res	Rotating Int Med Obg Ortho Surg Path Ped Psych, Rad Surg
San Francisco General Hospital 1001 Potrero Ave 10	M 16#	CyCo	2-4 6	1 006	65	1	60 Int 63 Res	Rotating Mixed, Anes Int Med, Obg Ortho Surg Path Ped Rad, Surg Urol
Shriners Hospital for Crippled Children 19th Ave and Moraga St 22	I 16	NPCorp		60	100		2 Res	Ortho Surg
Southern Pacific General Hospital 1400 Fell St 17	I 16	NPCorp		450	76		2 Int 19 Res	Rotating Int Med Path Surg, Urol
U S Public Health Service Hospital 15th Avenue and Lake Street 18		USPHS	2-4 6	443	80		12 Int 14 Res	Rotating Int Med Ophth Ortho Surg Surg
University of California Hospitals Third & Parnassus Avenues 22	M 16X	State	3 4 6	471	81		47 Int 189 Res	St Med St Surg St Ped St Path Anes Card Dis Derm Gastro Int Med Obg Neuro Surg Neur Ophth Ortho Surg Otol Ped Allergy Path Ped Phys Med Plas Surg Rad Surg Urol
Veterans Administration Hospital 42nd Ave and Clement St 21	I 16#	VA	4 6	438			58 Res	Int Med Neur Ophth Ortho Surg Otol Path Rad Surg Urol
San Jose								
Agnews State Hospital Zone 14		State	6	4 200	23		5 Res	Psych
O Connor Hospital Forest and Di Salvo, 28		Church		275	48	2	4 Res	Path
Santa Clara County Hospital Los Gatos Rd 28	L 15 16	County	2 3 4	415	68		20 Int 34 Res	Rotating Anes Int Med Obg Path Ped, Pul Dis Rad Surg Urol
San Mateo								
Community Hospital of San Mateo Co 222 39th Avenue	L 15	County	3	232	62		2 Res	Int Med Obg, Ophth Path, Ped Surg Urol
San Pablo								
Brookside Hospital 2000 Vale Rd		Dist	2 3 6	236	77		1 Res	Path
Santa Barbara								
Santa Barbara Cottage Hospital 320 W Pueblo St		NPCorp	6	219	58	1	10 Int 17 Res	Rotating Int Med Path Surg
Santa Barbara General Hospital San Antonio Rd		County	6	319	54		5 Res	Gen Pract, Surg
Santa Monica								
St John's Hospital 1328 22nd St		Church	3	279	46		10 Res	Obg Path Ped, Surg
Santa Monica Hospital 1250 16th St		Church	6	234	47		8 Int 1 Res	Rotating Obg
Santa Rosa								
Sonoma County Hospital 3325 Chanate Rd		County	3	344	30		8 Res	Gen Pract
Sepulveda								
Veterans Administration Hospital 16800 Plummer St		VA	3	956	88	**	18 Res	Int Med, Psych
Springville								
Tulare-Kings Counties Hospital		County	***	249	86	**	1 Res	Pul Dis

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
CALIFORNIA—Continued								
Stockton								
San Joaquin General Hospital Box 1890		County	2	625	56		17 Int 21 Res	Rotating Int Med Obs Path Ped, Rad Surg
Stockton State Hospital 510 E Magnolia 3		State	2 3	3 731	43		14 Res	Psych
Talmadge								
Mendocino State Hospital Box X		State	1	2 630	84		9 Res	Psych
Torrance								
Harbor General Hospital 1124 W Carson St	M 13	County	3 6	715	51		38 Int 82 Res	Rotating Anes Int Med Obs Ophth Ortho Surg Path, Ped Rad Surg Thor Surg Urol
Vallejo								
Kaiser Foundation Hospital 2600 Alameda St		NPCorp		198	88		1 Res	Phys Med
Ventura								
General Hospital Ventura County 3291 Loma Vista Rd		County	2 6	334	23		10 Res	Gen Pract
CANAL ZONE								
Balboa Heights								
Gorgas Hospital P O Box O		Fed	3	440	77		16 Int 24 Res	Rotating Int Med Obs Ophth Path, Ped Surg
COLORADO								
Colorado Springs								
Penrose Hospital 2215 N Cascade Ave		Church	3 6	184	70	3	6 Int 14 Res	Rotating Gen Pract Path Rad
St Francis Hospital E Pikes Peak Avenue		Church	6	160	54	3	3 Res	Gen Pract
Denver								
Children's Hospital 1056 E 19th Ave 18		NPCorp		203	86		19 Res	Ortho Surg Path Ped Surg
Colorado General Hospital 4200 E Ninth Ave 20	M 17X	State	6	284	79	11	24 Int 140 Res	Rotating St Ped St Surg Anes Derm Gen Pract Int Med Neuro Surg Neur Obs Ophth Ortho Surg Otol Ped Allergy Path Ped Phys Med Pul Dis Rad Surg Urol
Colorado Psychopathic Hospital 4200 E 9th St 20	M 17X	State	6				54 Res	Psych
Denver General Hospital W 6th Ave and Cherokee St 4	M 17	CyCo	4 6	429	74	11	40 Int 65 Res	Rotating Anes Gen Pract Int Med Neuro Surg Neur, Obs, Ophth Ortho Surg Otol Ped Allergy Path Ped Pul Dis Rad Surg Urol
Fitzsimons General Hospital Peoria and Colfax 30		VA		902	88		24 Int 54 Res	Rotating Card Dis Int Med Neur Obs Ophth Ortho Surg Otol Path Ped Pul Dis Rad Surg Thor Surg
General Rose Memorial Hospital 1000 Clermont St 20		NPCorp		250	60	4	10 Int 8 Res	Rotating Card Dis Path Rad
Mercy Hospital 1619 Milwaukee St 6		Church	6	250	53	9	11 Int 11 Res	Rotating Gen Pract Int Med Path Surg
National Jewish Hospital 3800 E Colfax Ave 6		NPCorp	6	390	65	10	13 Res	Pul Dis, Thor Surg
Porter Sanitarium and Hospital 2525 S Downing 10		Church	6	210	55	3	12 Int 1 Res	Rotating Path
Presbyterian Hospital 19th Ave and Gilpin St 18		Church	3	198	66	1	13 Int 18 Res	Rotating Int Med Obs Path Rad Surg
St Anthony Hospital W Quitman and 16th Sts 4		Church	6	275	62	3	10 Int 4 Res	Rotating Path
St Joseph's Hospital 1818 Humboldt St 18		Church		380	58	9	14 Int 30 Res	Rotating Gen Pract Int Med Obs Path Rad Surg
St Luke's Hospital 601 E 19th Ave 3		Church	3 6	443	61	4	14 Int 18 Res	Rotating Int Med Path Rad Surg
Veterans Administration Hospital 1055 Clermont 20	M 17#	VA	6	528	92	1	73 Res	Anes Int Med Neuro Surg Neur Ortho Surg Path Phys Med Psych Rad Surg Thor Surg, Urol
Greeley								
Weld County General Hospital 1801 16th St		County		250	49	2	4 Int	Rotating
Pueblo								
Colorado State Hospital Thirteenth and Francisco		State		6 170	64	50	63 Res	Int Med Path Psych Surg
St Mary-Corwin Hospital 1008 Minnequa		Church	3 6	368	38	20	8 Int 21 Res	Rotating Gen Pract Int Med Surg
CONNECTICUT								
Bridgeport								
Bridgeport Hospital 267 Grant St 10		NPCorp	6	449	39	10	14 Int 24 Res	Rotating Anes Gen Pract Int Med, Ob Path Rad, Surg
St Vincent's Hospital 2800 Main St 6		Church	6	369	43	6	15 Int 20 Res	Rotating Int Med Ob Path Rad Surg
Bristol								
Bristol Hospital Newell Rd		NPCorp	6	177	25	6	6 Int	Rotating
Danbury								
Danbury Hospital 95 Locust Ave		NPCorp	6	230	42	9	8 Int 4 Res	Rotating Path Surg
Derby								
Griffin Hospital Seymour Ave and Division St		NPCorp		161	38	7	7 Int 2 Res	Rotating Path
Greenwich								
Greenwich Hospital Perryridge Rd		NPCorp		245	72	1	10 Int 6 Res	Rotating Int Med Path, Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
CONNECTICUT—Continued								
Hartford								
Hartford Hospital 80 Seymour St, 15		NPCorp	4	810	73	8	18 Int 93 Res	Rotating Anes, Int Med, Neuro Surg, Obg Path, Ped, Rad, Surg
Hartford Municipal Hospital and Health Center 2 Holcomb St 5		City	6	207	46		10 Int 4 Res	Rotating, Int Med, Surg
Institute of Living 200 Retreat Ave 2		NPCorp	6	423	50	5	16 Res	Psych
Mount Sinai Hospital 500 Blue Hills Ave 12		NPCorp	1	187	42	6	6 Int	Rotating
St Francis Hospital 114 Woodland St, 5		Church	4-5-6	560	53	6	13 Int 34 Res	Rotating Anes, Int Med, Obg, Path, Ped, Surg
Manchester								
Manchester Memorial Hospital 71 Haynes St		NPCorp	6	205	54	1	4 Int	Rotating
Meriden								
Meriden Hospital 181 Cook Ave		NPCorp		263	34	5	5 Int 2 Res	Rotating, Path
Middletown								
Connecticut State Hospital		State	6	3,180	30	5	24 Res	Psych
Middlesex Memorial Hospital 28 Crescent St		NPCorp		168	45	2	4 Int 2 Res	Rotating Path
New Britain								
New Britain General Hospital 92 Grand St		NPCorp	3 6	314	53	7	9 Int 15 Res	Rotating Int Med, OBG, Path, Surg
New Canaan								
Silver Hill Foundation Valley Rd		NPCorp	2-5	60			2 Res	Psych
New Haven								
Grace-New Haven Community Hospital 789 Howard Ave 4	M 18X	NPCorp	4-6	602	67	11	45 Int 139 Res	St Med, St Surg, St Ped, St Path, Anes Derm Gastro, Int Med, Neuro Surg, Neur, OBG, Ophth, Ortho Surg, Otol, Path Ped, Phys Med Psych, Rad, Surg, Thor Surg, Urol
Hospital of St Raphael 1450 Chapel St 11		Church	4 6	370	49	17	15 Int 50 Res	Rotating Anes, Int Med, OBG, Ortho Surg, Path, Ped, Rad, Surg, Thor Surg,
Newington								
Cedarcrest Hospital Zone 11		State	6	282	41		2 Res	Pul Dis, Thor Surg
Newington Hospital for Crippled Children 181 E Cedar St 11		NPCorp		161		1	1 Res	Ortho Surg
Veterans Administration Hospital 555 Willard Ave, 11		VA	2	266	78		9 Res	Int Med, Path
New London								
Lawrence and Memorial Hospitals 365 Montauk Ave		NPCorp		208	52	7	4 Int 9 Res	Rotating, Int Med, OBG, Surg
Newtown								
Fairfield State Hospital Box W		State	6	3,214	31	2	24 Res	Psych
Norwalk								
Norwalk Hospital 24 Stevens St		NPCorp	6	303	54	21	12 Int 14 Res	Rotating Int Med, Obg, Path, Surg
Norwich								
Norwich State Hospital Laurel Hill Rd		State	6	3,210	37	4	25 Res	Psych
Uncas on Thames Hospital		State		362	54	3	6 Res	Pul Dis Thor Surg
Rocky Hill								
State of Connecticut Veterans Home and Hospital West St		State		496	70		3 Res	Phys Med
Shelton								
Laurel Heights Hospital Coram Ave		State	6	252	51	1	2 Res	Pul Dis
Stamford								
Stamford Hospital 199 W Broad St		NPCorp	6	308	80	6	10 Int 7 Res	Rotating Path Surg
Torrington								
Charlotte Hungerford Hospital 540 Litchfield St		NPCorp		125	24	3	4 Res	Gen Pract
Waterbury								
St Mary's Hospital 56 Franklin St, 6		Church	4	345	50	16	7 Int 21 Res	Rotating, Anes Int Med, Path, Rad, Surg
Waterbury Hospital 64 Robbins St, 8		NPCorp	4-6	373	48	4	9 Int 16 Res	Rotating, Int Med, Path, Ped, Rad, Surg, Urol
West Haven								
Veterans Admin Hospital West Spring Street, 16	M 18#	VA	2	773	81		56 Res	Card Dis, Gastro Int Med, Neuro, Path, Psych, Surg, Urol
DELAWARE								
Dover								
Delaware State Board of Health 414 S State St		State					1 Res	Public Health
Farnhurst								
Delaware State Hospital		State		1,567		5	Res	Psych
Wilmington								
Alfred I Du Pont Institute of the Nemours Foundation Rockland Rd, 99		NPCorp		65			2 Res	Ortho Surg
Delaware Hospital 501 W 14th St, 99		NPCorp	4-5-6	379	66		16 Int 31 Res	Rotating, Card Dis, Int Med, Obg, Path, Ped, Rad, Surg, Urol
E I du Pont de Nemours and Co, Inc Zone 98	•	Corp					1 Res	Occup Med
Memorial Hospital 1501 N Van Buren, 6		NPCorp	4-6	374	62	14	12 Int 13 Res	Rotating, Int Med Path, Surg
Wilmington General Hospital Chestnut at Broom St., 6	••	NPCorp	6	317	45	16	6 Int 18 Res	Rotating, Gen Pract, Int Med, Obg, Path

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
DISTRICT OF COLUMBIA								
Washington								
Armed Forces Institute of Pathology Zone 25		Fed	3 5				20 Res	Path
Army Medical Center (See Walter Reed General Hospital)								
Children's Hospital 2125 13th St N W 9	M 19 20	NPCorp	3 4	200	100	5	30 Re	Neuro Surg Ortho Surg, Path Ped Allergy Ped Psych Surg
Columbia Hospital for Women and Lying in Asylum 2425 L St N W 7		NPCorp		118	98	3	9 Res	OBG
District of Columbia General Hospital 19th and Massachusetts Ave 3	M 19 20	City	4 1	1 118	47	41	62 Int 125 Res	Rotating Anes Int Med Neuro Surg Neuro Obg Ophth Ortho Surg Path Ped Phys Med Psych Pul Dis Rad Surg Urol
Doctors Hospital 1815 Eye St N W 6		Corp		307	6	24	12 Int 18 Res	Rotating Int Med Obg Path Rad Surg
Eastern Dispensary and Casualty Hospital 8th and Mass Ave N E 2		NPCorp	1 6	15	34	12	4 Res	Gen Pract Surg
Freedmen's Hospital 6th and Bryant St N W 1	M 21±	Fed	4 6	570	44	8	22 Int 31 Res	Rotating Card Dis Int Med Neuro Obg Ophth Ortho Surg Path Ped Psych Pul Dis Rad Surg Urol
Georgetown University Hospital 3800 Reservoir Rd N W 7	M 19X	Church	3 5	383	64	35	16 Int 137 Res	Mixed St Med Anes Int Med Neuro Surg Neuro Obg, Ophth Path Ped Phys Med Psych Rad Surg Urol
George Washington University Hospital 901 23rd St N W 7	M 20X	NPCorp	6	417	75	12	26 Int 75 Res	Rotating Anes Card Dis Int Med Neuro Surg Neur, Obg Path Phys Med Plas Surg Psych Pul Dis Rad Surg Thor Surg
Providence Hospital 1150 Varnum St N E 17		Church	1 1	350	49	16	22 Int 19 Res	Rotating St Surg Anes Int Med Obg Path Surg
St Elizabeth's Hospital 2600 Nichols Ave S E 20	L 20	Fed	2 1 6	7 413	46	4	12 Int 24 Res	Rotating Psych
Sibley Memorial Hospital 1150 N Capitol St 2		Church		248	55	18	10 Int 10 Res	Rotating Obg Path Surg
U S Air Force Hospital Andrews A F B Camp Springs 25		Air Force	7	250	73		4 Res	Gen Pract
Veterans Admin Hospital 2650 Wisconsin Ave N W 7	M 19 20	VA	3	335	66		37 Res	Int Med Ophth Path Rad Surg Urol
Walter Reed General Hospital (Army Medical Center) 6825 16th St N W 12	M 19	Army	2 3 4 5 6	1 750	83		30 Int 141 Res	Rotating Allergy Anes Card Dis Derm Gastro Int Med Neuro Surg Neur Obg Ophth Ortho Surg Otol Path Ped Phys Med Psych Rad Surg Thor Surg Urol
Washington Hospital Center 110 Irving St N W 10		NPCorp	4	778	57	37	42 Int 80 Res	Rotating St Surg Anes Int Med Obg Ophth Ortho Surg Otol Path Rad Surg
Washington Sanitarium and Hospital 7600 Carroll Ave 12 (Takoma Park Md)		Church	6	266	41	3	13 Int	Rotating
FLORIDA								
Bay Pines								
Veterans Admin Hospital		VA	3	516			Res	Urol
Coral Gables								
Veterans Admin Hospital 1200 Anastasia Ave 34	L 23±	VA	3	450	94	1	61 Res	Int Med Path Phys Med Surg
Daytona Beach								
Halifax District Hospital Lakeshore Dr		Dist		257	35		2 Res	Gen Pract
Ft Lauderdale								
Broward General Hospital 1600 S Andrews Ave		Dist		211	36		2 Res	Path
Gainesville								
University of Florida Teaching Hospital and Clinics University of Florida	M 22X	State		193	94		22 Int 75 Res	St Med St Surg St Ped St Path Anes Int Med Obg Path Ped Psych Rad Surg Urol
Jacksonville								
Baptist Memorial Hosp 800 Miami Rd 7		Church	6	311	59	16	12 Int 10 Res	Rotating Gen Pract Obg Path
Brewster Methodist Hospital 1640 Jefferson St 9		Church		160	32		6 Int	Rotating
Duval Medical Center 2000 Jefferson St 8	L 22	County	6	335	53	6	20 Int 33 Res	Rotating Int Med Obg Path Ped Psych Surg Urol
Florida State Board of Health P O Box 210 1		State					3 Res	Public Health
Hope Haven Hospital 5420 Atlantic Blvd 11		NPCorp	6	87	83		1 Res	Ortho Surg
Riverside Hospital 2033 Riverside Ave 4		NPCorp	1	49	43		2 Res	Int Med
St Luke's Hospital 1900 Boulevard 6		NPCorp	1 6	210	35	10	4 Int 10 Res	Rotating Gen Pract Int Med Obg Surg
St Vincent's Hospital Barrs and St Johns Ave 4		Church	6	360	50	19	18 Int 25 Res	Rotating Gen Pract Int Med Obg Path Ped Surg Urol
U S Naval Hospital Zone 14		Navy	6	400	97		6 Int	Rotating
Lantana								
Southeast Florida Tuberculosis Hospital Osborne Rd		State	6	465	68		1 Res	Pul Dis
Miami								
Jackson Memorial Hospital 1700 N W 10th Ave 36	M 23±	County	2 3 4 5 6	1 011	54	31	82 Int 221 Res	Rotating St Med St Surg St Ped Anes Card Dis Derm Int Med Neuro Obg Ophth Ortho Surg Otol Path Ped Psych Pul Dis Rad Surg Thor Surg Urol
Variety Children's Hosp 6125 S W 31st St	L 22	NPCorp		118	88		8 Res	Ortho Surg Ped

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
FLORIDA—Continued								
Miami Beach								
Mount Sinai Hospital of Greater Miami 4300 Alton Rd 40	L 23	NPCorp	6	258	49	13	18 Int 22 Res	Rotating Int Med OBG, Path, Surg
St Francis Hospital 250 W 63rd St 11		Church	6	250	36	14	8 Int 5 Res	Rotating Int Med, Obg, Surg
Orlando								
Orange Memorial Hospital 1416 Kuhl Ave	-	NPCorp	2 3	400	14		12 Int 23 Res	Rotating Int Med OBG Ortho Surg, Path Surg Urol
Pensacola								
Baptist Hospital 1000 W Moreno St		Church	6	300	60		6 Int 14 Res	Rotating Gen Pract Path
Sacred Heart Hospital 1010 N 12th Ave		Church	3	156	32	6	3 Int 3 Res	Rotating Gen Pract
U S Naval Hospital		Navy	2 6	375	80		6 Int	Rotating
U S Navy School of Aviation Medicine		Navy					3 Res	Aviation Med
St Petersburg								
American Legion Hospital for Crippled Children 2350 Lakeview Ave S 12		NPCorp		62	90		1 Res	Ortho Surg
Mound Park Hospital 701 Sixth St S		City	2	379	49	3	16 Int 6 Res	Rotating Gen Pract, OBG Surg
Tampa								
Southwest Florida Tuberculosis Hospital 4001 Tampa Bay Blvd 3		State	6	516	63		1 Res	Pul Dis
Tampa General Hospital Davis Islands 6		City		580	32	1	26 Int 22 Res	Rotating Int Med, OBG Ortho Surg Otol Surg, Urol
West Palm Beach								
Good Samaritan Hospital 1300 N Dixie Highway		NPCorp	2 3	222	29		5 Int	Rotating
St Mary's Hospital 900 49th St		Church	2 3 6	250	43		6 Int	Rotating
GEORGIA								
Athens								
Athens General Hospital 797 Cobb St		County	2 3 6	154	25		6 Int	Rotating
St Mary's Hospital 360 N Milledge Ave		Church	1-6	100	42	2	5 Int	Rotating
Atlanta								
Crawford W Long Memorial Hospital 35 Linden Ave N 13		Church	6	458	38	28	18 Int 43 Res	Rotating Int Med Obg Path Ped, Rad, Surg
Emory University Hospital 1364 Clifton Rd, N E 22	M 25X	NPCorp	6	315	60	12	24 Int 77 Res	St Med St Surg St Path Anes Card Dis Int Med Neuro Surg Ortho Surg Path Phys Med Psych Rad Surg Thor Surg
Georgia Baptist Hospital 300 Boulevard N E 12		Church		475	40	25	20 Int 24 Res	Rotating Int Med Obg Ortho Surg, Path Ped Surg
Grady Memorial Hospital 80 Butler St S F 3	M 25#	County	5	621	40	2	52 Int 126 Res	Rotating St Med St Surg St Ped Anes, Int Med Neuro Surg OBG, Ophth Ortho Surg Path Ped Psych Rad Surg Thor Surg Urol
Henrietta Egleston Hospital for Children 1405 Clifton Rd N E 22	M 25#	NPCorp		50	73		3 Res	Ped
Piedmont Hospital 1968 Peachtree Rd, N W 9		NPCorp	2 3	218	51	6	10 Int 14 Res	Rotating Int Med OBG, Rad Surg
St Joseph's Infirmary 265 Ivy St N E 8		Church	6	301	59	34	12 Int 22 Res	Rotating Card Dis Int Med Obg Path Ped Surg Urol
Veterans Administration Hospital 4158 Peachtree Rd N E 19	M 24#	VA	5 6	300	54		16 Int 30 Res	St Med Int Med Path Rad Surg, Urol
Augusta								
Eugene Talmadge Memorial Hospital 1120 15th St	M 24X	State	2 3 6	400	77	1	4 Int 89 Res	St Med Anes, Int Med Neuro Surg OBG Ophth Ortho Surg Path Ped, Psych Rad Surg Thor Surg, Urol
University Hospital University Place	M 24	City	3 5 6	432	39		18 Int 32 Res	Rotating, Anes Int Med Neuro Surg, Obg Ortho Surg Path Ped Psych Rad, Surg, Urol
Veterans Administration Hospital Wrightsboro Rd	M 24	VA	2 6	1,744	64		15 Res	Int Med Neuro Surg Psych Rad Surg
Columbus								
Medical Center 710 19th St		City		290	34		12 Int 4 Res	Rotating Gen Pract Path
Decatur								
Scottish Rite Hospital for Crippled Children 321 W Hill St		NPCorp	1 2 3	60			1 Res	Ortho Surg
Fort Benning								
Martin Army Hospital		Army	2-3-4-6	500	82		16 Int 6 Res	Rotating Surg
Fort Oglethorpe								
John L Hutcheson Memorial Tri County Hospital Gross Crescent Rd		County		110	46	2	6 Res	Gen Pract
Macon								
Macon Hospital 777 Hemlock St		CyCo	2 3	500	26		24 Int 16 Res	Rotating Gen Pract OBG Surg
Milledgeville								
Milledgeville State Hospital		State	2-6	12,000	15		10 Res	Psych
Rome								
Battey State Hospital	**	State		1,529			1 Res	Thor Surg
Floyd Hospital Turner and McCall Blvd	***	County	2-5-6	180	32	1	6 Int	Rotating
Savannah								
Memorial Hospital of Chatham County Waters Ave and 63rd St	***	Dist	***	250	54	4	10 Int 13 Res	Rotating Int Med OBG Path Surg Urol
Warm Springs								
Georgia Warm Springs Foundation*****	***	NPCorp	***	165		3	12 Res	Phys Med

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
HAWAII								
Honolulu								
Kapiolani Maternity and Gynecological Hospital 1611 Bingham St 14		NPCorp		110	46	6	7 Res	OBG
Kauikeolani Children's Hospital 226 N Kuakini St 17		NPCorp		100	83	1	7 Res	Ped
Kuakini Hospital 347 N Kuakini St 17		NPCorp		140	63	14	14 Int	Rotating
Leahi Hospital 3675 Kilauea Ave 16		NPCorp		4[illegible]	38	2	4 Res	Pul Dis Thor Surg
Queen's Hospital 1301 Punchbowl 1		NPCorp		387	73	8	1[illegible] Int 34 Res	Rotating Int Med OBG Path Psych Rad Surg
St Francis Hospital 2260 Liliha St 17		Church		219	52		12 Int 7 Res	Rotating Int Med OBG Path
Shriners Hospitals for Crippled Children 1310 Punahou St 14		NPCorp		50			1 Res	Ortho Surg
Tripler Army Hospital Moanalua Gardens		Army	[illegible]	1 000	77		30 Int 48 Res	Rotating Int Med OBG Ortho Surg Path Ped Rad Surg Urol
Kaneohe								
Hawaii State Hospital		State		1 234			9 Res	Psych
ILLINOIS								
Berwyn								
MacNeal Memorial Hospital 3249 S Oak Park Ave		NPCorp	6	2[illegible]	51	12	13 Int 10 Res	Rotating Gen Pract Surg
Blue Island								
St. Francis Hospital 12948 S Gregory St		Church	1	300	37	7	7 Int	Rotating
Chicago								
Alexian Brothers Hospital 1200 W Belden Ave 14		Church	1 6	258	38	6	2 Res	Path Surg
American Hospital 850 W Irving Park Rd 13		NPCorp		158	47	12	9 Int 8 Res	Rotating Path Surg
Augustana Hospital 411 W Dickens Ave 14		Church	6	320	50	17	10 Int 16 Res	Rotating Int Med Ob Path Rad Surg
Chicago Maternity Center 1336 S Newberry Ave 8		NPCorp	6			3	4 Res	Ob
Chicago State Hospital 6600 W Irving Park Rd 34		State		4 820	9		30 Res	Psych
Chicago State Tuberculosis Sanitarium 1919 W Taylor St 12		State	6	400	46	2	4 Res	Pul Dis Thor Surg
Chicago Wesley Memorial Hospital 250 E Superior St 11	M 2 ±	Church	6	90	57	7	24 Int 51 Res	Rotating Anes Int Med Neuro Surg Neur OBG Ophth Ortho Surg Otol Path Psych Rad Surg Urol
Children's Memorial Hospital 707 W Fullerton Ave 14	M 27	NPCorp	5	220	87	10	96 Res	Card Dis Ortho Surg Path Ped Rad Surg Thor Surg
City of Chicago Municipal Tuberculosis Sanitarium 5601 N Pulaski Rd 46	I 28	City		1 150	58	4	10 Res	Pul Dis Thor Surg
Columbus Hospital 2520 N Lakeview Ave 14		Church	1	112	48		16 Int 15 Res	Rotating Int Med Rad
Cook County Hospital 1825 W Harrison St 12	M 26 27 28 30	County		3 900	43		124 Int 191 Res	Rotating Derm Gastro Int Med Neur OBG Ophth Ortho Surg Otol Path Ped Pla Surg Psych Pul Dis Rad Surg Urol
Edgewater Hospital 5700 N Ashland Ave 26		NPCorp	5	290	45	8	10 Int 2 Res	Rotating Path
Englewood Hospital 6001 S Green St 21		NPCorp	6	160	41	8	6 Int 3 Res	Rotating Ob Path Surg
Evangelical Hospital 5421 S Morgan St 9		Church	6	190	34	4	7 Int	Rotating
Grant Hospital 551 W Grant Pl 14	I 30	NPCorp	6	247	56	18	11 Int 14 Res	Rotating Gen Pract Int Med OBG Path Ped Surg
Henrotin Hospital 939 N La Salle St 10		NPCorp		100	38		1 Res	Surg
Hospital of St Anthony de Padua 2875 W 19th St 23		Church		216	37	13	8 Int 4 Res	Rotating Ob Surg
Illinois Central Hospital 6800 Stony Island Ave 37	I 30	NPCorp	6	308	56	1	12 Int 13 Res	Rotating Int Med Path Rad Surg
Illinois Eye and Ear Infirmary 904 W Adams St 7		State		122	50		29 Res	Ophth Otol
Illinois Masonic Hospital 836 Wellington Ave 14		NPCorp	6	150	44	40	16 Int 26 Res	Rotating Anes Gen Pract Int Med OBG Path Ped Rad Surg
Illinois State Psychiatric Institute 1601 W Taylor St 12	I 28	State		431		4	45 Res	Psych
Jackson Park Hospital 7531 Stony Island Ave 49		Corp		151	40		6 Int	Rotating
Loretto Hospital 645 S Central Ave 44	I 28	Church	1	161	52	8	7 Int 9 Res	Rotating Psych
Louis A Weiss Memorial Hospital 4646 Marine Dr 40		NPCorp	6	219	43		22 Res	Gen Pract
Lutheran Deaconess Hospital 1138 N Leavitt 22		Church	1	180	43		5 Int 4 Res	Rotating Ob Surg
Mercy Hospital 2537 S Prairie Ave 16	M 28	Church	6	356	48	20	15 Int 55 Res	Rotating Int Med Neuro Surg OBG Path Ped Psych Rad Surg Urol
Michael Reese Hospital 2839 F Ellis Ave 16	M 26 I 27	NPCorp	4	872	72	33	42 Int 118 Res	Rotating St Med St Surg St Ped Allergy Anes Card Dis Int Med OBG Ophth Ortho Surg Otol Path Ped Allergy Ped Phys Med Psych Pul Dis Rad Surg Urol
Mount Sinai Hospital 2750 W 15th Pl 8	M 26	NPCorp		389	56	32	14 Int 58 Res	Rotating Anes Card Dis Int Med OBG Path Ped Psych Rad Surg Urol

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
ILLINOIS, Chicago—Continued								
Northwestern University Medical Center 303 E Chicago Ave 11		NPCorp	4 5-6			3	Res	Allergy Anes Card Dis, Derm, Gastro Gen Pract, Int Med Neuro Surg Neur Obg Ophth Ortho Surg, Otol, Path, Ped Allergy, Ped, Phys Med, Plas Surg, Proct, Psych, Pul Dis Rad, Surg, Thor Surg, Urol
Norwegian American Hospital 1044 N Francisco Ave 22		NPCorp		171	29	15	12 Int 4 Res	Rotating Path Surg
Passavant Memorial Hospital 303 E Superior St, 11	M 27	NPCorp	6	296	69	7	18 Int 33 Res	Rotating Anes Int Med Neuro Surg Obg Ophth, Ortho Surg Path, Rad, Surg, Urol
Presbyterian-St Luke's Hospital 1753 W Congress Pkwy, 12	M 30#	NPCorp	2-3	852	73	32	39 Int 111 Res	Rotating Anes Int Med Neuro Surg Neur OBG, Ophth, Ortho Surg, Otol, Path Ped Plas Surg Psych, Rad, Surg Urol
Provident Hospital 426 E 51st St 15		NPCorp		205	61	23	11 Int 13 Res	Rotating St Surg Int Med, OBG, Ped, Surg
Ravenswood Hospital 1931 W Wilson Ave 40		NPCorp	6	247	60	17	8 Int 5 Res	Rotating Path Surg
Resurrection Hospital 7435 W Talcott Ave 31		Church	1-3 6	260	67	2	12 Int	Rotating
St Anne's Hospital 4900 Thomas St 51		Church	6	328	33	21	12 Int 15 Res	Rotating Ob Ortho Surg Path Surg
St Bernard's Hospital 6337 S Harvard Ave 21		Church		181	39	3	8 Int 2 Res	Rotating Surg
St Elizabeth's Hospital 1431 N Claremont Ave 22		Church	1	266	43	14	10 Int 7 Res	Rotating OBG Ortho Surg Surg
St Joseph Hospital 2100 N Burling St 14	I 28	Church		200	46	1	8 Int 12 Res	Rotating Int Med OBG Path Surg
St Mary of Nazareth Hospital 1120 N Leavitt St 22		Church	6	278	37		10 Int 13 Res	Rotating Gen Pract Int Med Path Surg
Shriners Hospital for Crippled Children 2211 N Oak Park Ave 35		NPCorp		68			4 Res	Ortho Surg
South Chicago Community Hospital 2320 E 90rd St 17		NPCorp		250	34	11	12 Int	Rotating
South Shore Hospital 8015 S Luella Ave 17		NPCorp		175	38	8	7 Int 2 Res	Rotating Gen Pract
Swedish Covenant Hospital 5145 N California Ave 25		Church	6	225	55	4	9 Int 4 Res	Rotating Path
University of Chicago Clinics 950 E 59th St 37	M 29×	NPCorp	1	693	80	23	44 Int 150 Res	Rotating St Ped Anes Derm Int Med Neuro Surg Neur OBG Ophth, Ortho Surg Otol Path Ped, Psych Rad, Surg Urol
Univ of Illinois Research and Educational Hospitals 840 S Wood St 12	M 30×	State	4 6	625	83	8	36 Int 116 Res	Rotating Allergy, Anes, Derm Int Med Neuro Surg Neur OBG Ophth Ortho Surg, Otol Path Ped Allergy, Ped Phys Med Plas Surg Psych Rad, Surg Urol
Veterans Administration Research Hospital 333 E Huron St 11		VA	2 4 6	516	75	2	93 Res	Anes Gastro, Int Med Neuro Surg, Neur Ophth, Ortho Surg Otol Path, Phys Med Psych Rad, Surg Thor Surg Urol
Veterans Administration Hospital 820 S Damen Ave 12	M 26 30 I 28	VA	2 6	495	78		55 Res	Int Med Path Phys Med Psych, Rad Surg
Woodlawn Hospital 6060 Drexel Ave 37		NPCorp	6	150	72	6	6 Int 1 Res	Rotating Surg
Decatur Decatur and Macon County Hospital 2300 N Edward St		NPCorp	1 2 3 6	330	40		9 Int 8 Res	Rotating Anes, Path
Downey Veterans Administration Hospital		VA	2-6	2 487	91		18 Res	Psych
East Peoria Caterpillar Tractor Company 600 W Washington St		Corp					1 Res	Occup Med
Evanston Evanston Hospital 2650 Ridge Ave	M 27	NPCorp	6	387	77	4	24 Int 36 Res	Rotating Anes, Int Med Neuro Surg OBG Ophth, Ortho Surg, Path, Ped, Rad, Surg
St Francis Hospital 355 Ridge Ave		Church	6	396	75	3	14 Int 24 Res	Rotating Int Med, OBG Ortho Surg, Path, Ped Rad, Surg
Evergreen Park Little Company of Mary Hospital 2800 W 95th St, 42		Church	6	456	37	14	24 Int 25 Res	Rotating OBG, Ped, Rad Surg
Galesburg Galesburg State Research Hospital North Seminary St		State	6	1 794	37	3	8 Res	Psych
Great Lakes U S Naval Hospital		Navy	2 4-5-6	925	98		10 Int 11 Res	Rotating Int Med OBG Surg
Hines Veterans Administration Hospital	L 28 30	VA	2 4-6	2 100	58		175 Res	Anes Derm Int Med Neuro Surg Neur, Ophth, Ortho Surg Otol Path, Phys Med Plas Surg, Psych Rad Surg, Thor Surg Urol
Hinsdale Hinsdale Sanitarium and Hospital 120 N Oak St		Church	3-6	195	49		10 Int	Rotating
Suburban Cook County Tuberculosis Sanitarium 55th and County Line Rd		Dist	6	209	87	2	1 Res	Thor Surg
Joliet St Joseph Hospital 372 N Broadway St		Church		294	23		5 Res	Anes
La Grange Community Memorial General Hospital 5101 Willow Springs Rd		NPCorp	*	98	61		2 Res	Surg
Mount Vernon Mount Vernon State Tuberculosis Sanitarium 601 N 18th	** ***	State	*	150	19	1	2 Res	Pul Dis

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
ILLINOIS—Continued								
Oak Forest								
Cook County Hospital-Oak Forest Tuberculosis Hospital 159th and Cicero Ave		County		2 668	17		1 Res	Pul Dis
Oak Park								
Oak Park Hospital 525 Wisconsin Ave		Church		243	17	13	12 Int	Rotating
West Suburban Hospital 618 N Austin Blvd		NPCorp	6	375	14	32	15 Int 9 Res	Rotating OBG Ortho Surg Path
Peoria								
Institute of Physical Medicine and Rehabilitation 619 N E Glen Oak Ave		NPCorp		135			2 Res	Phys Med
Methodist Hospital of Central Illinois 221 N E Glen Oak Ave		Church	6	347	52		16 Int 12 Res	Rotating Path Surg
Peoria Municipal Tuberculosis Sanitarium P O Box 60		City		100	45	1	1 Res	Pul Dis
St Francis Hospital 530 N E Glen Oak Ave		Church	7 6	610	54	9	18 Int 20 Res	Rotating Int Med OBG Ortho Surg, Path, Ped, Rad Surg
Rockford								
Rockford Memorial Hospital 2400 N Rockton Ave		NPCorp	1	240	93	1	8 Int 7 Res	Rotating Path Rad
St Anthony Hospital 1401 E State St		Church	6	214	43	7	6 Int 7 Res	Rotating OBG Path Surg
Swedish-American Hospital 1316 Charles St		NPCorp	6	200	43		8 Int	Rotating
Springfield								
Illinois State Department of Health		State					6 Res	Public Health
Urbana								
Carle Memorial Hospital 602 W University Ave		NPCorp		101	49		2 Res	Path Rad
Winnetka								
North Shore Hospital 725 Sheridan Rd			6	100	58		2 Res	Psych
INDIANA								
Bluffton								
Clinic Hospital 305 S Main St		Corp	6	125	81	1	10 Res	Int Med Rad, Surg
East Chicago								
St Catharine Hospital 4321 Fir St		Church	5 1	311	46		8 Int	Rotating
Evansville								
St Mary's Hospital 3500 Washington Ave 15		Church	2 6	40	96		4 Int	Rotating
Fort Wayne								
Lutheran Hospital 3024 Fairfield Ave		Church	1 6	438	33		6 Int	Rotating
St Joseph's Hospital 730 W Berry St 2		Church	1	260	33	1	8 Res	Path
Gary								
Methodist Hospital 1600 W Sixth Ave		Church	6	330	58		12 Int 4 Res	Rotating Path
St Mary Mercy Hospital 540 Tyler St		Church	3 6	294	13	1	8 Int	Rotating
Hammond								
St Margaret Hospital 25 Douglas St		Church	7 1	325	36		12 Int	Rotating
Indianapolis								
Indiana University Medical Center 1100 W Michigan St 7	M 31X	State	4 1	835	61	2	35 Int Res	Rotating St Med St Surg Family Practice Anes Int Med Neuro Surg Neur Obg Ophth Ortho Surg Otol Path Ped Plas Surg, Psych, Rad Surg Urol
James D Carter Memorial Hospital 1315 W 10th St 7	I 31X	State	1	225	100		36 Res	Psych
Marion County General Hospital 960 Locke St 7	M 31X	Civic	6 1	611	44		40 Int 78 Res	Rotating Anes Card Dis Derm Gastro Int Med Neur, OBG Ophth Ortho Surg Otol Path Ped Psych Rad Surg Urol
Methodist Hospital 1601 N Capitol Ave 7		Church	2 6	635	49	2	13 Int 48 Res	Rotating Gen Pract Int Med OBG Ortho Surg Path Ped Rad Surg Urol
St Vincent's Hospital 130 W Fall Creek Pkwy		Church	1 3 6	300	40		10 Int 22 Res	Rotating Card Dis Int Med OBG Ortho Surg Path Ped Surg
Veterans Admin Hosp 1481 W Tenth St 7	M 31X	VA	6	715	72		32 Res	Anes Int Med Neuro Surg Ortho Surg Path Plas Surg Psych Rad Surg Urol
Lafayette								
St Elizabeth Hospital 1021 N 34th St		Church	6	312	20	1	4 Int 11 Res	Rotating Int Med OBG Path Surg
Logansport								
Logansport State Hospital		State	6	2 400	14	1	4 Res	Psych
Muncie								
Ball Memorial Hospital 2401 University Ave		NPCorp	7	418	42	1	8 Int 5 Res	Rotating Path Surg
South Bend								
Memorial Hospital 615 N Michigan St 1		NPCorp	7 6	308	49		10 Int 2 Res	Rotating Path
St Joseph's Hospital 811 E Madison St 22		Church	3 1	214	39		3 Int	Rotating
South Bend Medical Foundation 631 N Main St 1		NPCorp	2	681	32		8 Res	Path
Vincennes								
Good Samaritan Hospital 412 S 7th St		County		219	36		1 Res	Path
Westville								
Dr Norman M Beatty Memorial Hosp		State	2 6	2 091	35		3 Res	Psych

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
IOWA								
Cedar Rapids								
Mercy Hospital 836 Sixth Ave S E		Church	8	222	55		10 Int	Rotating
St Luke's Methodist Hosp 1026 A Ave, N E		Church		316	52	2	13 Int 4 Res	Rotating Path
Cherokee								
Mental Health Institute 1200 W Cedar		State	6	1,282	57	1	12 Res	Psych
Des Moines								
Broadlawns Polk County Hospital 18th and Hickman Rd 14		County	3	232	50		16 Int 4 Res	Rotating Gen Pract Surg
Iowa Lutheran Hospital 716 Parnell Ave 16		Church	3	250	31	10	10 Int	Rotating
Iowa Methodist Hospital 1200 Pleasant St 14		Church	6	449	59	4	10 Int 25 Res	Rotating Int Med Path Ped Rad Surg
Mercy Hospital 5th and Ascension Sts 14		Church		200	75	2	14 Int 4 Res	Rotating Path
Veterans Administration Hospital 30th and Euclid Ave 8		VA	2	386	74		44 Res	Anes Int Med, Ortho Surg Path, Rad Surg, Urol
Independence								
Mental Health Institute		State		1 211	44		12 Res	Psych
Iowa City								
Iowa State Psychopathic Hospital 500 Newton Rd	L 32X	State	6	60		5	24 Res	Psych
Mercy Hospital 214 N Van Buren St		Church		210	21	2	2 Res	Path Surg
State University of Iowa Hospitals Newton Rd	M 32X	State	4 6	909	69	25	20 Int 173 Res	Rotating Anes Derm, Int Med Neuro Surg, Neur OBG Ophth, Ortho Surg Otol, Path, Ped Rad Surg Thor Surg Urol
Veterans Administration Hospital	I 32#	VA	2 6	484	78	1	40 Res	Anes Int Med Neur Otol, Path Rad, Surg
KANSAS								
Halstead								
Halstead Hospital 328 Poplar St		Church	3	160	65		1 Res	Path
Kansas City								
Bethany Hospital 51 N 12th St 7		Church	6	194	38		8 Int	Rotating
St Margaret's Hospital 759 Vermont Ave 8		Church	1 3	215	41	1	8 Int 3 Res	Rotating Surg
University of Kansas Medical Center 39th and Rainbow Blvd 12	M 33X	State	4 7	628	75		29 Int 150 Res	Rotating Mixed St Med St Surg St Ped St Path Family Practice Anes Card Dis Gastro Int Med, Neuro Surg, Neur OBG Ophth Ortho Surg Otol, Path Ped, Ped Allergy, Phys Med Plas Surg Psych, Pul Dis, Rad Surg Thor Surg Urol
Topeka								
C F Menninger Memorial Hospital 3617 W Sixth Ave		NPCorp		118		2	8 Res	Psych
Topeka State Hospital West Sixth St		State	6	1 499	72	17	20 Res	Psych
Veterans Administration Hospital 2200 Gage Blvd		VA	2	1 011	79		45 Res	Neur Psych
Wadsworth								
Veterans Administration Hospital		VA	2 4 5	836	68		12 Res	Phys Med Surg
Wichita								
St Francis Hospital 928 N Emporia Ave		Church	6	700	65	30	18 Int 32 Res	Rotating Anes Gen Pract Int Med OBG, Ortho Surg, Path, Rad Surg
Veterans Administration Center 5500 E Kellogg 18		VA	2	252	77	1	4 Res	Surg
Wesley Hospital 550 N Hillside Ave 14		Church	6	487	47	9	18 Int 11 Res	Rotating Gen Pract, Int Med, OBG Path Surg
Wichita-St Joseph Hospital 3400 Grand Ave 18		Church	6	385	33	13	12 Int 3 Res	Rotating Path
KENTUCKY								
Covington								
St Elizabeth Hospital 21st and Eastern Ave		Church		349	30	8	14 Int 2 Res	Rotating Path
William Booth Memorial Hospital 323 E 2nd St Box 472		Church	6	150	29		6 Res	Gen Pract
Fort Campbell								
U S Army Hospital		Army	2	350	66		3 Res	Surg
Fort Knox								
Ireland Army Hospital		Army	1 3 4	500	58		16 Int	Rotating
Harlan								
Harlan Memorial Hospital		NPCorp	6	187	50	4	19 Res	Int Med Path Surg
Lakeland								
Central State Hospital		State	6	2,379	18	1	6 Res	Psych
Lexington								
Central Baptist Hospital 1740 S Limestone St		Church	1	167	28	3	7 Res	Gen Pract OBG
Good Samaritan Hospital 310 S Limestone St		Church	6	250	35	12	5 Int 12 Res	Rotating Int Med OBG Ortho Surg, Surg
St Joseph Hospital 1400 Harrodsburg Rd		Church	6	269	37	14	8 Int 20 Res	Rotating, Int Med OBG Ortho Surg Surg Urol
Shriners Hospitals for Crippled Children 1900 Richmond Rd		NPCorp		50	100		2 Res	Ortho Surg
U S Public Health Service Hospital		USPHS	2-6	1 264	70		18 Res	Psych
Veterans Administration Hospital		VA	2	1,171	45		4 Res	Psych
Louisville								
Children's Hospital 226 E Chestnut St 2	M 34#	NPCorp	6	200	72	9	16 Res	Anes Neuro Surg Path Ped, Surg
Jewish Hospital 217 E Chestnut St, 2	M 34#	NPCorp		118			2 Res	Int Med
Kentucky Baptist Hospital 810 Barret Ave 4		Church	1-2	345	27	4	12 Int	Rotating

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
KENTUCKY, Louisville—Continued								
Kosair Crippled Children Hospital 982 Eastern Pkwy 17	I 34	NPCorp		100			4 Res	Ortho Surg
Louisville General Hospital 323 E Chestnut St 2	M 34#	CyCo	4 5 6	306	69	37	44 Int 117 Res	Rotating St Med St Surg St Ped St Path Anes Int Med Neuro Surg Neur, OBG Ophth Ortho Surg Otol, Path Ped, Phys Med Psych Rad Surg Urol
Norton Memorial Infirmary 231 W Oak St 3	I 34#	NPCorp	6	298	36	4	6 Int 12 Res	Rotating Neuro Surg Psych Surg
St Anthony Hospital 1313 St Anthony Pl 4		Church	6	235	26	6	6 Int	Rotating
St Joseph Infirmary 735 Eastern Pkwy 17		Church	6	440	43	3	18 Int 25 Res	Rotating Int Med OBG Ped, Rad Surg
SS Mary and Elizabeth Hospital 4400 Churchman Ave 15		Church	5	192	42	5	9 Int 2 Res	Rotating Path
Veterans Administration Hospital Mellwood and Zorn Ave 2	M 34#	VA	2 6	494	68		40 Res	Int Med Neuro Surg Neur, Ophth Ortho Surg Otol, Path Psych Rad Surg Urol
LOUISIANA								
Lafayette								
Lafayette Charity Hospital 311 W St Mary Blvd		State		471	67		23 Res	Gen Pract Surg
Monroe								
E A Conway Memorial Hospital Columbia Rd		State		212	57	1	10 Res	Gen Pract
New Orleans								
Charity Hospital of Louisiana 1532 Tulane Ave 12	M 35 36	State	1 4 6	2 786	89		126 Int 329 Res	Rotating Anes Derm Int Med Neuro Surg Neur OBG Ophth, Ortho Surg Otol Path Ped Psych Pul Dis Surg Thor Surg Urol
Eye Ear Nose and Throat Hospital 145 Elk Pl, 12	L 36	NPCorp	6	110		3	10 Res	Ophth Otol
Hotel Dieu 2004 Tulane Ave 18		Church	6	291	30	15	12 Int 12 Res	Rotating Path Ped Rad Surg
Mercy Hospital 301 N Jefferson Davis Pkwy 19		Church	6	194	40	6	8 Int	Rotating
Ochsner Foundation Hospital 1516 Jefferson Highway 21	I 36	NPCorp	6	152	85	5	8 Int 62 Res	St Med St Surg Anes Card Dis Gastro Int Med Neuro Surg Obg Ophth Ortho Surg Path Proct Rad Surg Urol
Southern Baptist Hospital 2700 Napoleon Ave 15	I 36	Church	6	437	41	11	24 Int 25 Res	Rotating Int Med OBG Path Ped Rad Surg
Touro Infirmary 3500 Prytania St 15	L 36	NPCorp	6	462	63	4	25 Int 36 Re	Rotating Gastro Gen Pract Int Med OBG, Ortho Surg, Path, Ped Rad Surg Urol
U S Public Health Service Hospital 210 State St 18		USPHS	4	400	88		12 Int 24 Res	Rotating Int Med OBG Ophth Path Rad Surg
Veterans Administration Hospital 1601 Perdido St 12	I 35-36	VA	2 4 6	492	78		56 Res	Anes Int Med Ophth Ortho Surg Path Psych Surg Urol
Pineville								
Huey P Long Charity Hospital Hospital Blvd	L 36	State	1 2 6	279	49		12 Res	Gen Pract
Shreveport								
Confederate Memorial Medical Center 1541 Kingshighway	L 36	State	2 3 4 5	1 002	30	3	46 Int 66 Res	Rotating Int Med Obg Ophth Ortho Surg Path Ped Rad Surg Thor Surg Urol
Doctors Hospital and Research Foundation 1130 Louisiana Ave 7		Corp	1 3	135	36		4 Int	Rotating
Highland Hospital 1000 Highland Ave 30		Corp		144	31		4 Int	Rotating
T F Schumpert Memorial Sanitarium 915 Margaret Pl 15		Church	6	325	38		7 Int	Rotating
Shriners Hospitals for Crippled Children Kingshighway and Sanford Ave 49		NPCorp		60			2 Res	Ortho Surg
MAINE								
Bangor								
Eastern Maine General Hospital 489 State St		NPCorp	2	297	55		6 Int 7 Res	Rotating Anes Path, Rad
Fairfield								
Central Maine Sanatorium Mountain Ave		State	6	136	44		1 Res	Pul Dis
Lewiston								
Central Maine General Hospital 300 Main St		NPCorp	6	220	53	3	4 Int 5 Res	Rotating Anes Int Med Path Ped Surg
Portland								
Maine Medical Center 22 Bramhall St 4	L-41	NPCorp	2 3 6	400	43		12 Int 31 Res	Rotating Anes Card Dis Gen Pract Int Med Path Ped Rad Surg
MARYLAND								
Army Chemical Center								
U S Army Environmental Health Center		Army					1 Res	Occup Med.
Baltimore								
Baltimore City Hospitals 4940 Eastern Ave 24	M 37	City	4 5 6 7	1 497	61	32	31 Int 75 Res	Rotating Mixed St Med St Surg St Ped Family Practice Anes Int Med Neuro Surg Neur OBG Ortho Surg Path Ped Rad Surg
Baltimore Eye Ear and Throat Hospital 1214 Eutaw Pl 17		NPCorp	3	68		2	6 Res	Ophth Otol
Bon Secours Hospital 2025 W Fayette St 23		Church	1	255	30	18	10 Int 7 Res	Rotating OBG Surg
Children's Hospital 3825 Greenspring Ave 11		NPCorp		124			1 Res	Ortho Surg
Church Home and Hospital Broadway and Fairmount Ave 31		Church	6	180	53	25	13 Int 19 Res	Rotating St Med Int Med Ob Surg
Franklin Square Hospital 100 N Calhoun St 23		NPCorp		175	61	20	9 Int 18 Res	Rotating, Int Med OBG Path Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
MARYLAND, Baltimore—Continued								
Hospital for Women Lafayette Ave and John St 17		NPCorp	6	162	56	13	6 Int 17 Res	Mixed Int Med, OBG
James Lawrence Kernan Hospital for Crippled Children Windsor Mill Rd and Forest Pk Ave, 7		Corp		91			2 Res	Ortho Surg
Johns Hopkins Hospital 601 N Broadway, 5	M 37	NPCorp	4-6	987	68	10	64 Int 194 Res	St Med, St Surg St Ped, St Path, St Ob Gyn, Anes Derm, Int Med Neuro Surg, Neur, OBG, Ophth, Ortho Surg, Otol Path Ped Allergy, Ped, Plas Surg, Psych, Rad, Surg Urol
Lutheran Hospital 730 Ashburton St, 16		Church	4	191	48	29	10 Int 23 Res	Rotating Int Med, OBG, Path, Surg
Maryland General Hospital 827 Linden Ave 1	J 38#	Church	6	336	40	25	14 Int 26 Res	Rotating Int Med, OBG, Path, Surg
Mercy Hospital Calvert and Saratoga Sts 2	L 38#	Church	4-6	279	47	10	16 Int 21 Res	Rotating Int Med OBG Otol Path, Ped, Surg
Provident Hospital 1514 Division St, 17		NPCorp	4-6	137	52	12	9 Int 12 Res	Rotating Path, Ped Surg
St Agnes Hospital Wilkens and Caton Ave, 29		Church	6	222	47	11	9 Int 18 Res	Rotating, Int Med, OBG, Surg
St Joseph's Hospital 1400 N Caroline St, 13		Church		240	55	25	8 Int 20 Res	Rotating, Int Med, OBG, Path, Surg
Seton Institute 6420 Reisterstown Rd, 15		Church		302	44	[illegible]	12 Res	Psych
Sinai Hospital Belvedere Ave at Greenspring, 15		NPCorp	4-6	308	59	27	23 Int 55 Res	Rotating, Mixed, St Med, St Surg, St Ped, Int Med OBG, Path, Ped, Rad, Surg, Urol
South Baltimore General Hospital 1213 Light St 30		NPCorp	6	181	34	21	8 Int 18 Res	Rotating Int Med OBG, Otol, Surg
State of Maryland Dept of Health 301 W Preston St 1		State					2 Res	Public Health
Union Memorial Hospital 33rd and Calvert Sts 18		NPCorp	6	365	44	28	18 Int 31 Res	Rotating, St Surg Int Med, OBG, Path Ped, Surg
U S Public Health Service Hospital Wyman Park Dr and 31st St, 11		USPHS	2-4	366	81		12 Int 23 Res	Rotating Int Med Ophth, Path, Rad, Surg
University Hospital Redwood and Greene Sts, 1	M 38X	State	4-5 6	598	59	33	30 Int 160 Res	Rotating St Med St Surg St Ped, Anes, Derm Gen Pract, Int Med, Neuro Surg, Neur, OBG, Ortho Surg Otol Path Ped Allergy, Ped, Psych, Rad, Surg, Thor Surg, Urol
Veterans Administration Hospital 3900 Loch Raven Blvd, 18	I 38	VA	2-6	291	80		3 Res	Pul Dis, Thor Surg
Bethesda National Institutes of Health-Clinical Center Zone 14		Fed	2 5 6	516	94		36 Res	Derm, Int Med, Neur Ophth Path Psych, Rad
Suburban Hospital 8600 Old Georgetown Rd, 14		NPCorp		200	49	15	19 Int 10 Res	Rotating Gen Pract Path
U S Naval Hospital	M 19	Navy	6	925	90		18 Int 74 Res	Rotating Anes Card Dis, Int Med, Neur OBG, Ophth Ortho Surg, Otol Path Ped, Plas Surg Psych Rad, Surg, Urol
Catonsville Spring Grove State Hospital Wade Ave 28		State	4 6	2,985	38	10	18 Res	Psych
Cheverly Prince George's General Hospital		County		300	65	28	22 Int 20 Res	Rotating Int Med, OBG, Path, Surg
Crownsville Crownsville State Hospital		State	4-6	2,209	34	9	12 Res	Psych
Fort Howard Veterans Administration Hospital	L 38#	VA	2-6	377	61		24 Res	Derm Int Med, Surg, Urol
Glenn Dale Glenn Dale Hospital	L 19	City	6	600	60	7	6 Res	Pul Dis
Hagerstown Washington County Hospital King and Antietam Sts		NPCorp	6	293	37	1	8 Int 1 Res	Rotating, Rad
Perry Point Veterans Administration Hospital	L 38#	VA	2 6	1,715	83		14 Res	Int Med, Psych, Surg
Rockville Chestnut Lodge 500 W Montgomery Ave		Corp		90			4 Res	Psych
Sykesville Springfield State Hospital		State	6	3,474	34	8	15 Res	Psych
Towson Sheppard and Enoch Pratt Hospital Zone 4		NPCorp		250	33	1	10 Res	Psych
MASSACHUSETTS								
Bedford Veterans Administration Hospital Springs Rd	M 41	VA	2 6	1,803	61		9 Res	Psych
Belmont McLean Hospital 1075 Pleasant St, 79		NPCorp	6	271	71	3	17 Res	Psych
Beverly Beverly Hospital Heather and Herrick Sts		NPCorp		259	71	4	8 Int 8 Res	Rotating, Int Med, Path, Surg
Boston Beth Israel Hospital 330 Brookline Ave 15	M 40-41	NPCorp	3 4-6	342	54	13	16 Int 60 Res	St Med, St Surg Anes Card Dis, Gastro, Int Med, OB, Otol, Path, Psych Rad, Surg, Urol
Boston City Hospital 818 Harrison Ave, 18	M 39 40-41	City	4-5-6	1,456	58	35	74 Int 241 Res	St Med, St Surg St Ped, St Path, Anes, Derm, Int Med, Neuro Surg, Neur, OBG Ophth, Ortho Surg, Otol, Path, Ped, Psych, Rad, Surg, Thor Surg, Urol
Boston Floating Hospital 20 Ash St, 11	M 41	NPCorp	2	80	86	6	6 Int 12 Res	St Ped, Ped
Boston Lying-in Hospital 221 Longwood Ave, 15	M 40	NPCorp		175	67		16 Res	OBG Path
Boston Sanatorium 249 River St, 26		City		500	19		4 Res	Pul Dis, Thor Surg
Boston State Hospital 591 Morton St 24	L 39, M-41	State		3,047	41	8	28 Res	Psych

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
MASSACHUSETTS Boston—Continued								
Carney Hospital 2100 Dorchester Ave 24		Church	1 6	318	50	14	12 Int 42 Res	Rotating Int Med OBG Path Surg
Children's Hospital Medical Center 300 Longwood Ave 15	M-40	NPCorp	1 6	357	83	46	7 Int 61 Res	St Ped St Path Neuro Surg Neur Ortho Surg Path Ped Ped Allergy Surg
Faulkner Hospital 1153 Centre St Jamaica Plain 30	L-39	NPCorp	6	14	47	1	3 Res	Int Med Path Rad
Harvard University School of Public Health 55 Shattuck St 15		NPCorp						Occup Med
Lahey Clinic 605 Commonwealth Ave 15		Corp				41	56 Res	Anes Gastro Int Med Ortho Surg Rad Surg
Lemuel Shattuck Hospital 170 Morton St J P 30	I 39-40-41	State	6	156	68	6	24 Res	Int Med Neur Path Rad
Long Island Hospital 69	L-40	City	1 6	700	54	8	8 Res	Int Med
Massachusetts Eye and Ear Infirmary 243 Charles St 14	M-40	NPCorp	6	169	50	2	15 Res	Ophth Otol
Massachusetts General Hospital Fruit St 14	M-40	NPCorp	1 6	631	73	8	30 Int 150 Res	St Med St Surg St Ped St Path Anes Derm Int Med Neuro Surg Neur Ortho Surg Path Ped Allergy Ped Phys Med Psych Rad Surg Urol
Massachusetts Memorial Hospitals 750 Harrison Ave 18	M 39	NPCorp		237	63	19	16 Int 81 Res	St Med St Path St Surg Anes Derm Gastro Int Med Neur OBG Ophth Path Psych Rad Surg Urol
Massachusetts Mental Health Center 74 Fenwood Rd 15	M-40	State	2 3 5	174		1	50 Res	Psych
New England Center Hospital 171 Harrison Ave 11	L-40 M-41	NPCorp	6	208	79	29	19 Int 67 Res	St Med St Surg Anes Int Med Neuro Surg Neur Gyn Path Psych Rad Surg Urol
New England Deaconess Hospital 15 Deaconess Rd 15	L-40	NPCorp	6	357	63	18	45 Res	Anes Int Med Path Rad Thor Surg
New England Hospital Columbus Ave and Dimock St 19		NPCorp		122	58	10	6 Int 11 Res	Rotating Anes Gen Pract OBG Surg
Peter Bent Brigham Hospital 721 Huntington Ave 15	M-40	NPCorp	6	282	71	43	16 Int 79 Res	St Med St Surg Anes Card Dis Int Med Neuro Surg Ortho Surg Path Psych Rad Surg Urol
St Elizabeth's Hospital 736 Cambridge St (Brighton) 35	M-41	Church	6	400	57		14 Int 27 Res	Rotating Anes Int Med OBG Path Surg
St Margaret's Hospital 90 Cushing Ave 25	M 41	Church	1 6	116	55	2	18 Res	OBG
U S Public Health Service Hospital 77 Warren St 35 (Brighton)		USPHS	1 6	247	82		10 Int 6 Res	Rotating Int Med Surg
Veterans Administration Hospital 150 S Huntington Ave 30	M 39 41	VA	2 4 6	920	68	1	135 Res	Anes Int Med Neuro Surg Neur Ophth Ortho Surg Otol Path Phys Med Psych Rad Surg, Urol.
Brockton								
Brockton Hospital 680 Centre St 11		NPCorp		241	42		6 Int 1 Res	Rotating Surg
Veterans Administration Hospital Belmont St 5		VA	2 4	188	65		6 Res	Psych
Brookline								
Free Hospital for Women 245 Pond Ave 46	M 40	NPCorp	6	50	62	6	14 Res	OBG Path
Cambridge								
Cambridge City Hospital 1493 Cambridge St 39	M-41	City	6	240	31	17	12 Int 15 Res	Rotating Anes Int Med OBG Path Surg
Cambridge Sanatorium 799 Concord Ave	L-41	City	6	100	50	2	2 Res	Pul Dis
Mount Auburn Hospital 330 Mount Auburn St 38	L 40	NPCorp		248	56	9	5 Int 10 Res	Mixed Anes Int Med Path Rad Surg
Canton								
Massachusetts Hospital School Randolph		State	2	177			2 Res	Ortho Surg
Chelsea								
Lawrence F Quigley Memorial Hospital Soldiers Home 100 Summit Ave 50		State	4	300	43	9	1 Res	Int Med Surg Urol.
U S Naval Hospital		Navy	2 4 6	575	83		12 Int 30 Res	Rotating Anes Int Med OBG Ortho Surg Ped Rad Surg
Fall River								
Fall River General Hospital 245 Stanley St		City		220	14		1 Res	Surg
St Anne's Hospital 795 Middle St		Church	7	160	38	5	5 Res	Gen Pract
Truesdale Hospital 1829 Highland Ave		NPCorp		152	45	13	9 Int 4 Res	Rotating Path Surg
Union Hospital Highland Ave at New Boston Rd		NPCorp	3	183	23	7	10 Int	Rotating
Fitchburg								
Burbank Hospital Nichols Rd		City		236	60		4 Res	Path Surg
Foxborough								
Foxborough State Hospital Chestnut St		State		1 244	36	7	8 Res	Psych
Framingham								
Framingham Union Hospital 1 Evergreen St		NPCorp	6	165	61		6 Int 2 Res	Rotating Path
Holyoke								
Holyoke Hospital 575 Beech St		NPCorp	4	197	30	3	6 Int 3 Res	Rotating Path
Providence Hospital 1233 Main St		Church		222	28		6 Int	Rotating
Lawrence								
Lawrence General Hospital 1 Garden St		NPCorp	6	290	75	5	6 Int 7 Res	Rotating Int Med Path
Lowell								
Lowell General Hospital 29 Varnum Ave		NPCorp		215	35	4	4 Int	Rotating

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
MASSACHUSETTS, Lowell—Continued								
St John's Hospital 14 Bartlett St		Church	6	183	54	5	6 Int	Rotating
St Joseph's Hospital 830 Merrimack St		Church	1-6	180	33	2	4 Int	Rotating
Lynn								
Lynn Hospital 212 Boston St		NPCorp	3 6	290	33	7	10 Int 2 Res	Rotating, Path, Urol
Malden								
Malden Hospital Hospital Rd, 48		NPCorp	6	218	42	7	6 Int 8 Res	Rotating, Path, Surg
Medfield								
Medfield State Hospital Box A		State	6	1,190	37	8	12 Res	Psych
Methuen								
Bon Secours Hospital 70 East St		Church		165	30		6 Int	Rotating
Middleboro								
Lakeville State Sanatorium		State		248	63		2 Res	Ortho Surg
New Bedford								
St Luke's Hospital 101 Page St		NPCorp	6	360	33	8	10 Int 3 Res	Rotating, Int Med, Path
Newton Lower Falls								
Newton Wellesley Hospital 2014 Washington St, 62		NPCorp	6	285	42	7	8 Int 9 Res	Rotating, Int Med, Path, Surg
Pittsfield								
Pittsfield General Hospital 741 North St		NPCorp		179	46	2	8 Int 2 Res	Rotating Psych
St Luke's Hospital 379 East St		Church	6	148	66	4	6 Int	Rotating
Quincy								
Quincy City Hospital 114 Whitwell St, 69		City	4	251	38	19	12 Int 10 Res	Rotating Path, Surg
Rutland Heights								
Veterans Administration Hospital		VA	2	507	57	1	1 Res	Pul Dis
Salem								
Salem Hospital 81 Highland Ave		NPCorp	6	261	35	8	6 Int 4 Res	Rotating, Path
Springfield								
Mercy Hospital 233 Carew St, 4		Church		340	37	3	8 Int	Rotating
Shriners Hospital for Crippled Children 516 Carew St, 4		NPCorp	1	60			2 Res	Ortho Surg
Springfield Hospital 759 Chestnut St, 7		NPCorp	6	401	45	27	15 Int 30 Res	Rotating, Anes, Int Med, Path, Ped, Surg
Wesson Maternity Hospital 735 Chestnut St, 7		NPCorp		90	75		2 Res	Ob
Wesson Memorial Hospital 140 High St, 5		NPCorp		199	40		6 Int	Rotating
Stockbridge								
Austen Riggs Center Main St		NPCorp	2 6	41			7 Res	Psych
Taunton								
Taunton State Hospital Hodges Ave Ext		State	5	1,942	21	9	6 Res	Psych
Walpole								
Pondville Hospital Box 111	I 40	State	4-5	110	65	2	7 Res	Int Med Path, Surg
Waltham								
Metropolitan State Hospital 475 Trapelo Rd, 54	M 41	State		2,054	46	2	2 Res	Psych
Middlesex County Sanatorium	J 40	County	6	180	55	1	1 Res	Pul Dis
Waltham Hospital Hope Ave, 54	M 41	NPCorp		162	32		6 Int	Rotating
Waverley								
Walter E Fernald State School Box C, Trapello Rd, 78		State	2	2,450	68		2 Res	Psych
Westborough								
Westborough State Hospital Lyman St		State	6	2,027	30		2 Res	Psych
Westfield								
Westfield State Sanatorium		State	4	190	64	7	6 Res	Pul Dis, Surg
West Roxbury								
Veterans Administration Hospital 1400 Veterans Foreign Wars Pkwy, 32	L 40	VA	2-6	304	83	1	16 Res	Card Dis, Path, Rad, Urol
Worcester								
Memorial Hospital 119 Belmont St, 5		NPCorp	4-6	288	66	24	11 Int 16 Res	Rotating, Int Med, Path, Surg
St Vincent Hospital 25 Winthrop St, 10		Church		555	47		18 Int 31 Res	Rotating Anes, Card Dis, Int Med, Path, Ped, Surg
Worcester City Hospital 71 Jaques Ave, 10		City	4 6	448	49	10	12 Int 27 Res	Rotating, Gen Pract, Int Med, Ortho Surg, Path, Ped, Surg
Worcester County Sanatorium Zone 6		County		122	65	3	3 Res	Pul Dis
Worcester State Hospital 305 Belmont St, 1	M 41	State	4-6	2 692	39		39 Res	Psych
MICHIGAN								
Ann Arbor								
St Joseph Mercy Hospital 326 N Ingalls St	L 42	Church	6	444	76	3	16 Int 29 Res	Rotating, Int Med, OBG, Path, Plas Surg, Rad, Surg
University Hospital 1405 E Ann St	M 42×	State	4-5	995	74	27	44 Int 337 Res	Rotating Allergy, Anes, Derm, Gastro, Int Med, Neuro Surg, Neur, OBG, Ophth, Ortho Surg, Otol, Path, Ped, Phys Med, Psych, Rad, Surg, Thor Surg, Urol
University of Michigan, Institute of Industrial Health		State					Res	Occup Med

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
,AN—Continued								
ek								
unity Hospital mkins St		NPCorp	2 3 6	180	38		6 Int	Rotating
Post Montgomery Hospital ett St		Church	2 3 6	180	3	3	6 Int 6 Res	Rota ing Path Surg
arbor								
Hospital ard St	I-42	NPCorp	3 6	169	9		6 Int 2 Res	Rotating Gen Pract
Motor Co Medical Dept		Corp					1 Res	Occup Med
od Hospital		NPCorp		254	56	5	13 Int 16 Res	Rotating Gen Pract OBG Path Surg
Veteran Administration Hospital Southfield and Outer Dr	M-43±	VA	4	914	63	3	39 Res	Int Med Neur Ophth Ortho Surg Path Rad Surg
Detroit								
Alexander Blain Hospital 2201 Jefferson Ave F 7		NPCorp		64	38	7	7 Res	Int Med Surg
Children s Hospital of Michigan 3224 St Antoine St 2	M-43±	NPCorp		208	52		31 Res	Ortho Surg Path Ped Ped Allergy
Crittenton General Hospital 1254 Tuxedo Ave 6		NPCorp		193	40	1	6 Res	OBG
Detroit Memorial Hospital 1420 St Antoine St 2	M-43±	NPCorp		313	38	7	13 Int 17 Res	Rotating Int Med Obg Path Rad, Surg
Evangelical Deaconess Hospital 7245 F Jefferson Ave 7		Church		199	63	8	8 Int 10 Res	Rotating Gen Pract Int Med OBG Surg
General Motors Corporation 3044 W Grand Blvd 2		Corp					1 Re	Occup Med
Grace Hospital 4160 John R St 1	M-43±	NPCorp	6	735	52	19	24 Int 54 Res	Rotating Int Med Neuro Surg OBG Path, Rad, Surg Urol
Harper Hospital 3830 Brush St 1	M-43±	NPCorp	3	645	50	29	28 Int 90 Res	Rotating Anes Int Med OBG Ophth Ortho Surg Otol, Path Ped Rad Surg Urol
Henry Ford Hospital 2799 W Grand Blvd 2		NPCorp	5	946	75	49	26 Int 278 Re	Rotating Anes Card Dis Derm Gastro Gen Pract Int Med Neuro Surg Neur OBG Ophth Ortho Surg Otol Path Ped Plas Surg Psych Pul Dis Rad Surg Thor Surg Urol
Herman Kiefer Hospital 1151 Taylor St 2	M-43±	City	6	1245	54	19	31 Res	OBG Path Pul Dis Rad Thor Surg
Jennings Memorial Hospital 7815 E Jefferson Ave 14		NPCorp	6	195	36	1	2 Res	Int Med Surg
Lafayette Clinic 951 E Lafayette 7	I-4 ±	State		145			40 Res	Neur Psych
Mount Carmel Mercy Hospital 6071 W Outer Dr 35		Church	4 6	565	50	29	24 Int 40 Res	Rotating Int Med OBG Path Rad Surg
Providence Hospital 2400 W Grand Blvd 8		Church	3	396	54	3	12 Int 23 Res	Rotating Anes Int Med OBG Path Rad Surg
Receiving Hospital 1326 St Antoine St 26	M-43±	City	5 6	700	52	25	59 Int 79 Res	Rotating Anes Derm Int Med Neur OBG Ophth Ortho Surg Otol Path Ped Psych Rad Surg Urol
St John Hospital 22101 Moross Rd 36		NPCorp	5	292	48	6	12 Int 12 Res	Rotating Int Med OBG Surg
St Joseph Mercy Hospital 2900 E Grand Blvd 11		Church	3	205	50	4	9 Int 9 Re	Rotating Int Med OBG Surg
Sinai Hospital 6767 W Outer Dr 35		NPCorp	4 6	237	55	3	15 Int 37 Res	Rotating Anes Int Med OBG Ophth Path Rad Surg
Straith Memorial Hospital 2605 W Grand Blvd 8		NPCorp		32			3 Res	Plas Surg
U S Public Health Service Hospital 14700 Riverside Dr 15		USPHS		183	77		6 Res	Gen Pract
Woman s Hospital 435 E Hancock Ave 1		NPCorp	6	363	52	7	16 Int 19 Res	Rotating Int Med OBG Path Surg
Eloise								
Wayne County General Hospital and Infirmary	I-42 43	County		4,055	40	9	36 Int 57 Res	Rotating Int Med Neuro Surg Ortho Surg Path Psych Rad Surg Urol
Flint								
Hurley Hospital 6th and Begole Sts 2		City		604	64	17	25 Int 38 Res	Rotating Gen Pract Int Med Obg Path Ped Rad, Surg
McLaren General Hospital 401 Ballenger Highway 2	I-4?	NPCorp	3 6	284	54	10	12 Int 23 Res	Rotating Gen Pract Int Med Path Rad Surg
St Joseph Hospital 302 Kensington Ave 2		Church	3	408	49	1	16 Int 12 Res	Rotating Path Rad
Grand Rapids								
Blodgett Memorial Hospital 1840 Wealthy St S E 6		NPCorp	3 5	399	76	1	16 Int 10 Res	Rotating Int Med OBG Ortho Surg Path Plas Surg, Rad Surg
Butterworth Hospital 100 Michigan St N E 3		NPCorp	6	416	60	2	16 Int 32 Res	Rotating Anes Int Med OBG Path Ped Rad Surg
Ferguson Droste Ferguson Hosp 72 Sheldon Ave S E 2		NPCorp		92	57	1	4 Res	Proct
St Mary s Hospital 201 Lafayette Ave S E 3		Church	5	320	42		14 Int 14 Re	Rotating Int Med OBG Ortho Surg Path Surg
Grosse Pointe								
Bon Secours Hospital 468 Cadieux Rd 30		Church	3	160	42	8	8 Int 2 Res	Rotating Surg
Cottage Hospital 159 Kercheval Ave 36		NPCorp		104			3 Res	Gen Pract
Highland Park								
Highland Park General Hospital 299 Glendale Ave 3		City	✓	336	42	22	14 Int 15 Res	Rotating Int Med OBG Surg
Howell								
Michigan State Sanatorium		State		370	48		2 Res	Pul Dis
Kalamazoo								
Borgess Hospital 1521 Gull Rd 62		NPCorp	6	318	60	7	8 Int 14 Res	Rotating OBG Ortho Surg Path Surg
Bronson Methodist Hosp 252 E Lovell St 8		Church	3 6	258	54		6 Int 7 Res	Rotating Int Med Surg

Dr. Robert Meig Library
O. E. S. Medical College

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
MICHIGAN—Continued								
Lansing								
Edward W Sparrow Hospital 1215 E Michigan Ave 12		NPCorp	6	345	41		10 Int 6 Res	Rotating Int Med Path, Surg
Ingham Chest Hospital 401 W Greenlawn Ave 9		County	1	150	24	3	1 Res	Thor Surg
Michigan Dept of Health Highway M 174		State					1 Res	Public Health
St Lawrence Hospital 1210 W Saginaw St 16		Church	6	275	52	9	12 Int 6 Res	Rotating Int Med,
Midland								
Midland Hospital 4000 Orchard Dr	I 42	NPCorp	2 3-6	160	89		6 Int	Rotating
Muskegon								
Hackley Hospital 1700 Clinton St		NPCorp		235	46		10 Int	Rotating
Northville								
Hawthorn Center 18471 Haggerty Rd		State	6	65			8 Res	Psych
Northville State Hospital 11001 Seven Mile Rd		State	6	2 294	38	2	15 Res	Psych
Wm H Maybury Sanatorium		City	1	814	43	4	2 Res	Pul Dis
Pontiac								
Pontiac General Hospital Seminole At West Huron St 18		City	6	290	72	6	19 Int 24 Res	Rotating, Int Med OBG, Path Surg
Pontiac State Hospital State St 11		State	6	3 099	34	5	24 Res	Psych
St Joseph Mercy Hospital 900 Woodward Ave 19		Church	1 6	339	88	10	12 Int 25 Res	Rotating Gen Pract Int Med OBG Path, Ped, Rad, Surg
River Rouge								
Sidney A Sumby Memorial Hosp 234 Visger Rd 18		NPCorp		90	34	3	4 Res	Gen Pract
Royal Oak								
William Beaumont Hospital 3601 W 13 Mile Rd		NPCorp	2 6	259	55	15	12 Int 21 Res	Rotating Int Med OBG, Surg
Saginaw								
Saginaw General Hospital 1447 N Harrison St		NPCorp	6	216	61	2	6 Int 16 Res	Rotating Int Med OBG, Path, Ped, Surg
St Luke's Hospital 705 Cooper St 19		Church	6	211	72		8 Int	Rotating
St Mary's Hospital 830 S Jefferson Ave 16		Church	1 6	172	42	3	6 Int 2 Res	Rotating Gen Pract
Traverse City								
James Decker Munson Hospital 6th and Madison Sts		NPCorp	3 6	227	38		8 Int	Rotating
Traverse City State Hospital Elmwood and 11th		State	6	3 006	36	6	18 Res	Psych
Wyandotte								
Wyandotte General Hospital		City		230	31		8 Res	Gen Pract
Ypsilanti								
Ypsilanti State Hospital Box A		State	4 6	4 100	43	2	21 Res	Psych
MINNESOTA								
Duluth								
St Luke's Hospital 915 E First St 11		NPCorp	6	376	73	1	18 Int 4 Res	Rotating Path
St Mary's Hospital 407 E Third St 11		Church	3	375	70		12 Int 4 Res	Rotating Path
Minneapolis								
Elizabeth Kenny Institute 1800 Chicago Ave 4		NPCorp		120	40		3 Res	Phys Med
Methodist Hospital 6500 Excelsior Blvd St Louis Park 26		Church		247	75	3	12 Int 1 Res	Rotating Int Med
Minneapolis General Hospital 619 S 5th St 15	M 44#	City		444	61	5	39 Int 55 Res	Rotating Derm Int Med Neur OBG Ophth Ortho Surg, Otol Path, Ped Psych Surg Urol
Mount Sinai Hospital 737 E 22nd St 4		NPCorp	6	224	65	17	14 Int 5 Res	Rotating Int Med Path
Northwestern Hospital 810 E 27th St 7		NPCorp		271	74	12	15 Int 12 Res	Rotating, St Med St Surg St Ped Int Med OBG Path Ped Surg
St Barnabas Hospital 714 9th Ave S 4		Church		306	72	21	10 Int 8 Res	Rotating Int Med OBG Path Surg
St Mary's Hospital 2414 S 7th St 6		Church	6	420	59	12	12 Int 4 Res 4 Res	Rotating OBG Urol Ortho Surg
Shriners Hospital for Crippled Children 2025 E River Rd 14		NPCorp	6	60			2 Res	Public Health
State of Minnesota Dept of Health University Campus, 14		State						
Swedish Hospital 914 S Eighth St 4		NPCorp	3	444	46	25	14 Int 9 Res	Rotating OBG Path Rad Surg
University of Minnesota Hospitals 412 Union St S E 14	M 44X	State		755	86	59	40 Int 222 Res	St Med St Ped, St Surg, Anes Derm Int Med Neuro Surg Neur OBG Ophth Ortho Surg Otol, Path Ped Phys Med Proct Psych, Rad Surg Urol
Veterans Admin Hospital 48th Ave and 54th St S 17	M 44#	VA	2 5	1 014	82	9	139 Res	Derm Int Med Neuro Surg Neur Ophth Ortho Surg Otol Path Phys Med Psych Pul Dis Rad Surg, Thor Surg Urol
Nopeming								
Nopeming Sanatorium		County	6	221	51	4	1 Res	Pul Dis
Oak Terrace								
Glen Lake Sanatorium		County	6	234	72	8	4 Res	Pul Dis Thor Surg
Rochester								
Mayo Foundation 200 First St S W							415 Res	Allergy, Anes Card Dis Derm Gastro Int Med Neuro Surg Neur, OBG Ophth, Ortho Surg Otol Path, Ped Ped Allergy Phys Med Plas Surg Proct Psych Pul Dis Rad Surg, Thor Surg Urol
Rochester Methodist Hospital 1 First Ave N W		Church		512	78			

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
MINNESOTA Rochester—Continued								
St Mary s Hospital 1216 Second St S W		Church		900	88			
St Paul								
Ancker Hospital 490 Jefferson Ave 1	M 44#	City		8 0	60	2	76 Int 22 Res	Rotating Derm Int Med OBG Ophth Otol Path, Surg Urol
Bethesda Lutheran Hospital 559 Capitol Blvd 1		Church	6	178	46		8 Int	Rotating
Charles T Miller Hospital 1300 W College Ave 2		NPCorp	6	304	59		14 Int 17 Res	Rotating Int Med OBG Ophth Path Rad Surg Urol
Gillette State Hospital for Crippled Children 1003 E Ivy Ave 6		State		167	75		1 Res	Ortho Surg
Midway Hospital 1700 University Ave 4		Church	1	127	5	8	8 Re	Gen Pract
St Joseph s Hospital 60 W Exchange St 2		Church	6	2 5	47		14 Int 4 Res	Rotating OBG Path Surg
St Luke s Hospital 28 N Smith Ave 2		NPCorp		215	43	13	6 Int 8 Res	Rotating Gen Pract
MISSISSIPPI								
Biloxi								
U S Air Force Hospital Keesler Air Force Base		USAF	7	352	61		6 Res	Gen Pract
Veterans Admin Center		VA	1	915	81		10 Res	Psych
Jackson								
Mississippi Baptist Hosp 1100 N State St 2		Church		314	63		12 Int 5 Re	Rotating Gen Pract Ortho Surg Path
State of Mississippi Dept of Health Zone 5		State					3 Res	Public Health
University Hospital 2500 N State St 6	M 15X	State	1	3 5	63	2	23 Int 113 Res	Rotating Anes Gen Pract Int Med Neuro Surg OBG Ophth Ortho Surg Path Ped Plas Surg Psych Rad Surg Thor Surg Urol
Veterans Admin Hospital Lindburg Dr	I 4	VA	1	551	79		8 Res	Int Med Neuro Surg Ophth Ortho Surg Plas Surg Surg Urol
Sanatorium								
Mississippi State Sanatorium		State	6	600	14	1	3 Re	Pul Dis Thor Surg
Vicksburg								
Mercy Hospital-St Memorial 100 McAuley Dr		Church		100	34	2	3 Res	Surg
Vicksburg Hospital 1600 Monroe St		NPCorp	3	[illegible]	75	3	3 Re	Surg
Whitfield								
Mississippi State Hospital	I 4	State	1	4 59	37		6 Res	Psych
MISSOURI								
Clayton								
St Louis County Hosp 601 S Brentwood Blvd 5		County		190	61	11	10 Int 20 Res	Rotating Int Med OBG Path Surg
Columbia								
Ellis Fischel State Cancer Hospital Highway 40 and Garth Ave		State	5	104	60	2	2 Res	Surg
University of Missouri Medical Center 807 Stadium Rd	M 10X	State		271	3	4	6 Int 74 Res	St Med St Path Anes Gen Pract Int Med OBG Ophth Ortho Surg Path Ped Rad Surg
Kansas City								
Children s Mercy Hospital 1710 Independence Ave 6	M 3=	NPCorp	1	118	60	1	2 Int 10 Res	St Ped Ortho Surg Ped
Kansas City General Hospital 24th and Cherry Sts 8	M 33# 34#	City	3 5	450	50	22	30 Int 50 Res	Rotating Int Med OBG Ophth Ortho Surg Path Ped Plas Surg Psych Surg Urol
Menorah Medical Center 4949 Rockhill Rd 10	M 32=	NPCorp		337	80	8	14 Int 22 Res	Rotating Gen Pract Int Med Path Rad Surg
Research Hospital 2300 Holmes St 8		NPCorp		251	60	5	10 Int 8 Res	Rotating Path Rad
St Joseph Hospital 2530 E Linwood Blvd 28		Church	6	318	83 — 10		4 Int 14 Res	Rotating Int Med OBG Path Surg
St Luke s Hospital 4400 J C Nichols Pkwy 11		Church	6	445	61	3	18 Int 20 Res	Rotating Int Med OBG Ortho Surg Path Rad Surg
St Mary s Hospital 101 Memorial Dr 8		Church		300	54	5	12 Int 7 Res	Rotating Path Surg
Trinity Lutheran Hospital 3001 Wyandotte St 8		Church	6	202	59	8	8 Int 4 Res	Rotating Gen Pract
Veterans Admin Hosp 4801 Linwood Blvd 28	M 31=	VA	1 6	400	2		30 Res	Int Med Neur Ortho Surg Otol Path Phy Med Psych Rad Surg Urol
Koch								
Robert Koch Hospital		City		258	3	5	13 Res	Int Dis
Mt Vernon								
Missouri State Sanatorium		State		655	49	7	6 Res	Int Dis Thor Surg
St Joseph								
Missouri Methodist Hospital 8th and Faraon Sts		Church		300	98	7	4 Int 5 Res	Rotating Gen Pract Surg
St Joseph s Hospital 923 Powell St		Church	6	150	35	4	4 Int	Rotating
St Louis								
Barnes Hospital 600 S Kingshighway Blvd 10	M 45=	NPCorp	6	900	70	50	45 Int 214 Res	St Med St Surg St Path St OB Gyn Allergy Anes Derm Int Med Neuro Surg Neur OBG Ophth Ortho Surg Otol Path Plas Surg Psych Rad Surg Thor Surg Urol
Deaconess Hospital 6150 Oakland Ave 10		Church	6	323	42	20	12 Int	Rotating
De Paul Hospital 2415 N Kingshighway Blvd 13		Church	6	350	41	26	12 Int 20 Res	Rotating Gen Pract Int Med OBG Path Rad Surg
Homer G Phillips Hospital 2601 N Whittier St 13	I 48#	City	4 5 6	601	48	58	40 Int 94 Res	Rotating Int Med OBG Ophth Otol Path Ped Psych Rad Surg Urol
Jewish Hospital 216 S Kingshighway Blvd 10	I 48	NPCorp	4 6	48	45	11	18 Int 33 Re	Rotating Mixed Anc Int Med OBG Path Rad Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
MISSOURI, St Louis—Continued								
Lutheran Hospital 2639 Miami St 18		Church		325	40	15	12 Int 6 Res	Mixed Gen Pract
Missouri Baptist Hospital 919 N Taylor Ave 8		Church		486	38	27	16 Int 16 Res	Rotating Int Med, Path Surg
Missouri Pacific Hospital 1755 S Grand Blvd 4		NPCorp	1	375	48		24 Res	Int Med, Surg, Urol
St Anthony's Hospital 3520 Chippewa St 18	I 47#	NPCorp	6	250	25	11	7 Res	Gen Pract, Surg
St John's Hospital 307 S Euclid Ave 10	I 47#	Church	6	358	52	7	14 Int 18 Res	Rotating Anes Int Med, OBG, Path, Surg
St Louis Children's Hospital 500 S Kingshighway Blvd 10	M 48#	NPCorp	1 6	161	91		8 Int 30 Res	St Ped, Ped
St Louis City Hospital 1515 Lafayette Ave 4	M 46 47-48	City	6	907	60	31	70 Int 129 Res	Rotating, St Med, St Surg, St Ped Int Med, OBG, Ophth, Ortho Surg, Otol Path, Ped Psych, Rad, Surg, Urol
St Louis State Hospital 5400 Arsenal St 39	I 47	State	1	3 300	47	16	24 Res	Psych
St Luke's Hospital 553 Delmar Blvd 12	I 48	Church	6	300	64	1	12 Int 18 Res	Rotating Int Med, OBG, Path, Surg
St Mary's Group of Hospitals of St Louis University 1402 S Grand Blvd 4	M-47X	Church	6	983	65	19	34 Int 79 Res	Rotating St Med St Surg, St Ped Int Med OBG Ophth, Ortho Surg, Otol Path, Ped Plas Surg, Rad, Surg Urol
Shriners Hospitals for Crippled Children 710 S Kingshighway Blvd 10		NPCorp	1	120		1	3 Res	Ortho Surg
Veterans Admin Hospital 915 N Grand Blvd 8	I 47	VA	1 6	513	69		67 Res	Anes, Int Med Ophth, Ortho Surg, Otol, Path Psych Rad, Surg, Urol
Springfield								
St John's Hospital 1235 E Cherokee 4		Church	1-2 3	268	37		4 Res	Anes
MONTANA								
Butte								
St James Hospital Silver and Idaho Sts		Church	1	160	37	3	4 Int	Rotating
NEBRASKA								
Ingleside								
Hastings State Hospital		State	6	1,429	30	10	20 Res	Psych
Lincoln								
Bryan Memorial Hospital 4848 Sumner St 6	I 50	Church	6	128	60	1	4 Int	Rotating
Lincoln General Hospital 2315 S 17th St 2	L 50	NPCorp	6	170	51	1	4 Int 2 Res	Rotating, OBG, Path,
Nebraska Orthopedic Hosp 1947 South St 2		State		110	33		1 Res	Ortho Surg
St Elizabeth Hospital 1145 South St 2	I 49	Church		260	31	3	6 Int 6 Res	Rotating Surg
Veterans Admin Hosp Zone 1	M 49#	VA	1	249	68		12 Res	Int Med, Ortho Surg, Surg
Omaha								
Bishop Clarkson Memorial Hosp Dewey Ave at 44th St 5	I 50	Church	2 6	266	55		12 Int 3 Res	Rotating Path
Children's Memorial Hospital 44th and Dewey Ave 5	L 49 50	NPCorp	6	90	81	2	4 Int 8 Res	St Ped Ped
Creighton Memorial St Joseph Hospital 2305 S 10th St 8	M 49#	Church	2-4 6	616	41		18 Int 45 Res	Rotating Int Med, OBG Path, Ped Psych, Rad Surg
Immanuel Hospital 36th and Meredith Ave 11	I 50	Church		192	42	1	10 Int 2 Res	Rotating OBG Path
Nebraska Methodist Hosp 3612 Cuming St 31	I 50	Church	2 3-6	257	81		11 Int 8 Res	Rotating, Path Rad
Nebraska Psychiatric Institute 602 S 44th Ave 5		State	2-6	104	100		34 Res	Psych
St Catherine's Hospital 9th and Forest Ave 8	L 49	Church	6	200	61		8 Int	Rotating
University of Nebraska Hospital 42nd and Dewey Ave 5	M 50X	State		163	81	5	14 Int 39 Res	Rotating Anes Card Dis, Int Med, OBG, Ophth, Path, Ped Rad, Surg,
Veterans Admin Hosp 4101 Woolworth Ave 5	M 49# L 50	VA	1 6	446	68		34 Res	Int Med, Neur Path Psych, Rad, Surg
NEW HAMPSHIRE								
Concord								
New Hampshire State Hospital 105 Pleasant St		State	4-6	2,738	22		6 Res	Psych
Hanover								
Mary Hitchcock Memorial Hospital 2 Maynard St	M 51	NPCorp	6	266	81	4	16 Int 77 Res	Rotating Anes Derm, Int Med, Neuro Surg Ortho Surg, Path, Ped Phys Med, Rad, Surg, Urol
NEW JERSEY								
Atlantic City								
Atlantic City Hospital 1921 Pacific Ave		NPCorp	3-6	241	73	10	12 Int 10 Res	Rotating Int Med, Path, Surg
Bayonne								
Bayonne Hospital and Dispensary 18 E 30th St		NPCorp		260	25	10	10 Int 3 Res	Rotating, Urol
Belle Mead								
Carrier Clinic		Corp		89			2 Res	Psych
Camden								
Cooper Hospital Sixth and Stevens Sts 3	M 72	NPCorp	2-3	527	48	1	18 Int 16 Res	Rotating Int Med, OBG Path Ped, Plas Surg, Surg
Our Lady of Lourdes Hospital 1600 Haddon Ave 3		Church	1-6	295	51	4	10 Int 6 Res	Rotating Path Rad
West Jersey Hospital Mt Ephraim and Atlantic Aves 4		NPCorp	6	278	40	3	12 Int 8 Res	Rotating Anes Path Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
NEW JERSEY—Continued								
Cedar Grove								
Essex County Overbrook Hosp 1 Fairview Ave		County		3 478	32		15 Res	Psych
East Orange								
East Orange General Hospital Central and S Munn Aves		NPCorp		173	43	4	5 Int 1 Res	Rotating Path
Veterans Admin Hosp Tremont Ave and Center St		VA	4 6	9,0	68		36 Res	Int Med Neur Path Phys Med Pul Dis Rad Surg, Urol
Elizabeth								
Alexian Brothers Hospital 655 E Jersey St 1		Church		157	22	8	12 Int	Rotating
Elizabeth General Hospital and Dispensary 325 E Jersey St 4		NPCorp	6	243	32	11	12 Int	Rotating
St Elizabeth Hospital 204 S Broad St 2		Church	6	198	36	17	14 Int	Rotating
Englewood								
Englewood Hospital 350 Engle St		NPCorp	1 6	260	56	6	8 Int 1 Res	Rotating Path
Flemington								
Hunterdon Medical Center Route 69	L 71	NPCorp	6	171	61		5 Res	Gen Pract Path
Fort Dix								
First Army Headquarters		Army					1 Res	Public Health
Walson Army Hospital		Army		650			8 Res	Gen Pract
Glen Gardner								
New Jersey Sanatorium for Chest Diseases		State		317	36	2	5 Res	Pul Dis
Greystone Park								
New Jersey State Hospital		State	6	5 600	29		12 Res	Psych
Hackensack								
Hackensack Hospital 22 Hospital Pl		NPCorp	6	337	41	14	12 Int 17 Res	Rotating Anes Int Med OB Path Surg Urol
Hammonton								
New Jersey State Hospital at Ancora		State	4 6	2 548	42	1	12 Res	Psych
Hoboken								
St Mary Hospital 4th and Willow Ave		Church	6	375	31	25	15 Int 2 Res	Rotating Path
Jersey City								
B S Pollak Hospital for Chest Diseases 100 Clifton Pl 4	M 52	County		463	33	10	11 Res	Pul Dis Thor Surg
Christ Hospital 176 Palisade Ave 6		Church	6	333	33	22	12 Int 2 Res	Rotating Path
Jersey City Hospital 50 Baldwin Ave 4	M 52	City	4 5 6	1 054	34	59	60 Int 99 Res	Rotating St Med St Surg St Ped St Path Anes Int Med Gyn Ophth Path Ped Rad Surg Urol
Margaret Hague Maternity Hospital 88 Clifton Pl	M 52	County	6	249	14	5	14 Res	OB
St Francis Hospital 25 E Hamilton Pl 2		Church	6	215	39	8	10 Int	Rotating
Long Branch								
Monmouth Medical Center 3rd and Pavilion Aves		NPCorp	4 6	392	52	10	12 Int 11 Res	Rotating OB Ortho Surg Path Ped Surg
Lyons								
Veterans Admin Hosp	L 58	VA	-	2 009	40		9 Res	Psych
Marlboro								
New Jersey State Hospital		State	4	3 304	34		6 Res	Psych
Montclair								
Mountainside Hospital Bay and Highland Aves		NPCorp	4 6	333	60	3	14 Int 14 Res	Rotating Gen Pract Int Med Path Surg
Morristown								
All Souls Hospital 55 Mt Kemble Ave		Church	1 6	180	42	5	3 Int	Rotating
Morristown Memorial Hospital 100 Madison Ave		NPCorp		236	66	11	11 Int 11 Res	Rotating Gen Pract Path Rad Surg
Mt Holly								
Burlington County Hospital 175 Madison Ave		County		206	56	15	14 Res	Int Med OBG Path Surg
Neptune								
Fitkin Memorial Hospital Corlies Ave		NPCorp		209	42	2	10 Int 8 Res	Rotating Int Med Path Ped Surg
Newark								
Babies Hospital 15 Roseville Ave		NPCorp		84	83	4	9 Res	Ped
Harrison S Martland Medical Center 65 Bergen St 7		City	4 6	769	35	18	30 Int 26 Res	Rotating OBG Ortho Surg Path Surg Urol
Hospital for Crippled Children 89 Park Ave 4		NPCorp		108	50	2	4 Res	Ortho Surg
Newark Beth Israel Hosp 201 Lyons Ave 12		NPCorp	4 6	421	52	10	13 Int 21 Res	Rotating Card Dis Int Med OBG Path Ped Rad Surg
Newark Eye and Ear Infirmary 77 Central Ave 2		NPCorp		65	50	5	5 Res	Ophth Otol
Presbyterian Hospital 27 S Ninth St 7		NPCorp	6	311	34	11	10 Int 6 Res	Rotating Path Surg
St Barnabas Medical Center 685 High St 2		NPCorp	6	234	32	9	8 Int 6 Res	Rotating Path Plas Surg
St Michael's Hospital 306 High St 2		Church	6	401	50	9	15 Int 23 Res	Rotating Int Med OBG Path Ped Surg
New Brunswick								
Middlesex General Hospital 180 Somerset St		NPCorp	6	240	50	15	10 Int 10 Res	Rotating Int Med Path Surg
St Peter's General Hospital 200 Easton Ave		Church	6	260	40	11	10 Int 10 Res	Rotating Int Med Path Surg
Orange								
New Jersey Orthopaedic Hosp 179 Lincoln Ave		NPCorp		40		4	4 Res	Ortho Surg
Orange Memorial Hospital 188 S Essex Ave		NPCorp	6	339	46	1	10 Int 11 Res	Rotating Int Med Ortho Surg Path Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
NEW JERSEY—Continued								
Paramus								
Bergen Pines County Hosp E Ridgewood Ave		County		708	36	27	20 Int 20 Res	Rotating, Card Dis, Gastro, Int Med, Path, Psych, Pul Dis,
Passaic								
Passaic General Hospital 350 Boulevard		NPCorp	1-6	250	40	9	6 Int 4 Res	Rotating, OBG Path
St Mary's Hospital 211 Pennington Ave		Church	3-6	192	41		6 Int 2 Res	Rotating Path
Paterson								
Barnert Memorial Hospital 680 Broadway 4		NPCorp	6	147	44	4	6 Int 1 Res	Rotating, Path
Paterson General Hospital 328 Market St 3		NPCorp		347	32	12	12 Int 2 Res	Rotating, OBG Path
St Joseph Hospital 703 Main St 3		Church	6	442	50	9	12 Int 11 Res	Rotating, Anes, Ortho Surg, Path
Perth Amboy								
Perth Amboy General Hosp 530 New Brunswick Ave		NPCorp	1	352	31	12	14 Int 1 Res	Rotating Path
Plainfield								
Muhlenberg Hospital Park Ave and Randolph Rd		NPCorp	6	367	37	11	12 Int	Rotating
New Jersey Neuropsychiatric Institute Box 1000		State	6	1 032	68		11 Res	Psych
Princeton								
Princeton Hospital 253 Witherspoon St		NPCorp		176	72	5	6 Res	Gen Pract
Somerville								
Somerset Hospital Rehill Ave		NPCorp		211	46	8	8 Int 1 Res	Rotating Gen Pract
Summit								
Overlook Hospital 193 Morris Ave		NPCorp		250	50	13	12 Int 6 Res	Rotating Gen Pract, Path
Teaneck								
Holy Name Hospital 718 Teaneck Rd		Church	6	276	27	2	8 Int 1 Res	Rotating OB
Trenton								
Helene Fuld Hospital 750 Brunswick Ave 8		NPCorp	6	180	40	2	6 Int	Rotating
Mercer Hospital 446 Bellevue Ave 8		NPCorp	6	306	62	10	9 Int 2 Res	Rotating Path
New Jersey State Hosp Sullivan Way 8	L 74	State	6	3 424	27	1	7 Res	Psych
St Francis Hospital 601 Hamilton Ave 9		Church	6	361	63	12	10 Int 13 Res	Rotating Int Med, OBG, Path, Ped, Surg
Verona								
Essex County Sanatorium		County		483	68		5 Res	Pul Dis
NEW MEXICO								
Albuquerque								
Bataan Memorial Methodist Hosp 5400 Gibson Blvd S E		Church	6	163	70	1	12 Res	Int Med, Path, Rad
Bernalillo County Indian Hosp 2211 Lomas Blvd N E		County	2-3	216	48		12 Int 14 Res	Rotating Int Med, OBG Path Ped, Surg
Veterans Admin Hosp	L 17	VA	2	500	96		28 Res	Int Med Path, Pul Dis, Surg
Los Alamos								
Los Alamos Medical Center 3917 West Rd		NPCorp	1-2	77	94		2 Res	Gen Pract
Truth or Consequences								
Carrier Tingley Hospital 1400 S Broadway		State	6	100			3 Res	Ortho Surg
NEW YORK								
Albany								
Albany Hospital New Scotland Ave 8	M 53#	NPCorp	4	635	67	41	36 Int 120 Res	Rotating, St Med, St Surg Anes Int Med Neuro Surg, Neur, OBG Ortho Surg, Otol, Path, Ped Plas Surg, Psych, Pul Dis Rad, Surg Thor Surg, Urol
						3	6 Res	Path
Bender Laboratory Hospitals 136 So Lake Ave	M 53#	Church	6	63	71		3 Res	Ob Path
A N Brady Hospital 30 N Main Ave 3		NPCorp	6	235	32	11	14 Int 1 Res	Rotating, Path
Memorial Hospital Northern Blvd 4		Church	1-6	292	46	23	12 Int 8 Res 30 Res	Rotating, Path Ped Surg Public Health
St Peter's Hospital 632 New Scotland Ave 8		State						
State of New York Dept of Health 84 Holland Ave 8	M 53#	VA	2-4-6	1,005	76		41 Res	Int Med, Neur Path, Phys Med, Psych, Rad, Surg
Veterans Administration Hospital 113 Holland Ave		City	6	330	40	20	15 Int 8 Res	Rotating Int Med, Path
Binghamton								
Binghamton General Hospital 25 Park Ave		State	5-6	3,201	9	5	5 Res	Psych
Binghamton State Hospital 425 Robinson St		NPCorp		201	44	9	8 Int 1 Res	Rotating, Path
Bronxville								
Lawrence Hospital 55 Palmer Ave 8								
Brooklyn—See New York City								
Buffalo								
Allied Hospitals of the Sisters of Charity 2157 Main St, 14		Church	6	445	38	26	12 Int 20 Res	Rotating Int Med, OBG Path Surg
Buffalo General Hospital 100 High St, 3	M 54#	NPCorp	4-5-6	644	55	37	26 Int 81 Res	Rotating St Med Allergy, Anes Card Dis Int Med, Neuro Surg Neur, OBG, Ophth Ortho Surg, Otol Path, Proct, Rad, Surg Thor Surg, Urol
Buffalo State Hospital 400 Forest Ave, 13		State	4-6	3,534	17	13	6 Res	Psych
Children's Hospital 219 Bryant St, 22	M 54#	NPCorp	6	311	88	11	4 Int 29 Res	St Ped Ortho Surg, Ped Allergy, Ped, Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
NEW YORK—Continued								
Deaconess Hospital 563 Riley St 8		NPCorp		28[illegible]	43	2[illegible]	14 Int 17 Res	Rotating Int Med OBG Path Rad Surg
Edward F Meyer Memorial Hospital 462 Grider St 5	M[illegible]#	County	4 5	968	48	18	26 Int 100 Res	Rotating Anes Derm Int Med Neur OBG Ophth Ortho Surg Path Ped Psych Pul Dis Rad Surg Thor Surg Urol
Mercy Hospital 565 Abbott Rd 90		Church		360	46	6	19 Int 9 Res	Rotating Gen Pract Int Med
Millard Fillmore Hospital 2 Gates Circle 9	I[illegible]#	NPCorp	4	514	64	3	15 Int 40 Res	Rotating Anes Gen Pract Int Med OBG Path Proct Rad Surg Urol
Roswell Park Memorial Institute 666 Elm St 8	I[illegible]#	State	5 6	304	100	30	96 Res	Derm Int Med Path Rad Surg
Veterans Administration Hospital 349 Bailey Ave 16	I[illegible]#	VA	2 4 6	951	60	3	42 Res	Anes Int Med Ortho Surg Path Rad Surg Thor Surg
Canandaigua								
Veterans Administration Hospital Fort Hill Ave		VA	2	1 700	86		6 Res	Psych
Castle Point								
Veterans Administration Hospital		VA	2	299	7		1 Res	Thor Surg
Central Islip								
Central Islip State Hospital Carleton Ave		State	6	10 [illegible]7	3[illegible]	8	40 Res	Psych
Clifton Springs								
Clifton Springs Sanitarium and Clinic Main St		NPCorp	6	1[illegible]	48	2	6 Res	Int Med Surg
Cooperstown								
Mary Imogene Bassett Hospital Atwell Rd	I[illegible] M[illegible]	NPCorp	6	112	73		10 Int 13 Res	Rotating St Med Int Med OBG Path Ped Surg
Elmira								
Arnot Ogden Memorial Hospital Roe Ave		NPCorp		210	37	3	4 Int 1 Res	Rotating Path
St Joseph's Hospital [illegible] E Market St		Church	6	21[illegible]	4	2	[illegible] Int 1 Res	Rotating Path
Elmhurst—See New York City								
Farmingdale								
Nassau County Tuberculosis Hospital Round Swamp Rd I I		County		3[illegible]	77	3	4 Res	Pul Dis
Far Rockaway—See New York City								
Glen Cove								
Community Hospital St Andrews Lane		NPCorp	6	210	17	6	8 Int 4 Res	Rotating Gen Pract Path
Glen Oaks—See New York City								
Glens Falls								
Glens Falls Hospital 100 Park St		NPCorp		2[illegible]	42	1	9 Int 1 Res	Rotating Path
Governors Island—See New York City								
Harrison								
St Vincent's Hospital 210 North St		Church		20[illegible]		4	[illegible] Res	Psych
Helmuth								
Gowanda State Hospital		State	6	3 028	22	[illegible]	1[illegible] Res	Psych
Hempstead								
Meadowbrook Hospital Carman Ave and Bethpage Pike		County	2 [illegible]	600	40		32 Int 70 Res	Rotating Int Med OBG Ortho Surg Path Ped Plas Surg, Psych Rad Surg Urol
Irvington								
Irvington House No Broadway	L[illegible]	NPCorp		60	100	3	3 Res	Card Dis
Ithaca								
Cornell University Infirmary E State St		NPCorp		8[illegible]		2	[illegible] Res	Int Med
Tompkins County Hospital 1283 Trumansburg Rd		NPCorp		13[illegible]	4[illegible]		Res	Int Med
Jamaica—See New York City								
Johnson City								
Charles S Wilson Memorial Hospital 33-57 Harrison St		NPCorp		4[illegible]	3[illegible]	28	12 Int 23 Res	Rotating Int Med OBG Path Ped Rad Surg
Kenmore								
Kenmore Mercy Hospital 2900 Elmwood Ave 17		Church		300	[illegible]		12 Int	Rotating
Kings Park								
Kings Park State Hospital	I[illegible]	State	5 6	8 638	92	10	12 Res	Psych
Kingston								
Ulster County Tuberculosis Hospital Golden Hill		County		[illegible]0	47		2 Res	Pul Dis
Lockport								
Mount View Hospital Upper Mountain Rd		County		147	4[illegible]	1	3 Res	Pul Dis
Manhasset								
North Shore Hospital Valley Rd		NPCorp	6	169	[illegible]3	11	13 Res	Int Med OBG Path Ped Surg
Marcy								
Marcy State Hospital		State	6	3 01[illegible]	8[illegible]	10	1[illegible] Res	Psych
Middletown								
Middletown State Hospital		State	6	3 473	3[illegible]	7	14 Res	Psych
Mineola								
Nassau Hospital First St		NPCorp	6	31[illegible]	43	4	8 Int 21 Res	Rotating OBG Ortho Surg Path Rad Surg
Montrose								
Veterans Administration Hospital		VA	4	1 769	79		[illegible] Res	Psych
Mt Kisco								
Northern Westchester Hospital E Main St		NPCorp		14[illegible]	33	8	4 Int	Rotating
Mt Morris								
Mount Morris Tuberculosis Hospital		State	2	2[illegible]0	59	2	4 Res	Pul Dis Thor Surg
Mount Vernon								
Mount Vernon Hospital 12 N Seventh Ave	[illegible]	NPCorp	6	300	49	18	12 Int 10 Res	Rotating Int Med OBG Path Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
NEW YORK—Continued								
Newburgh								
St Luke's Hospital 70 Dubois St		NPCorp	6	187	34	9	8 Int 1 Res	Rotating Path
New Hyde Park—See New York City								
New Rochelle								
New Rochelle Hospital 16 Guion Pl		NPCorp	6	345	39		12 Int 8 Res	Rotating Int Med Path, Surg
New York City—includes all hospitals located within the five boroughs Bronx—Bronx County (Mailing address New York) Brooklyn—Kings County (Mailing address Brooklyn) Manhattan—New York County (Mailing address New York) Queens—Queens County (Mailing addresses Far Rockaway Flushing Glen Oaks Jamaica Long Island City) Richmond—Richmond County (Mailing address Staten Island)								
Beekman Downtown Hospital 170 William St		NPCorp		188	39	19	14 Res	Int Med Surg
Bellevue Hospital Center First Ave and 27th St 16	M 56 57 59	City	8	2,741	42	95	Res	Anes Derm Int Med Neur Surg, Neur OBG Ophth, Ortho Surg Otol, Path, Ped Phys Med Psych Pul Dis, Rad Surg, Thor Surg, Urol
Bellevue Hospital Center First Med Div—Columbia Univ	M 56		6-8				12 Int 46 Res	Mixed Int Med Pul Dis Surg Thor Surg
Bellevue Hospital Center First Surg Div—Columbia Univ	M 56		6-8				6 Int	Rotating St Surg
Bellevue Hospital Center Second Med Div—Cornell Univ	M 57		8				24 Int 40 Res	Mixed St Med Int Med Neuro Surg Neur Surg Urol
Bellevue Hospital Center Second Surg Div—Cornell Univ	M 57		6-8				7 Int	St Surg
Bellevue Hospital Center Third and Fourth Med Div—N Y Univ Col of Med	M 59		6-8				27 Int 172 Res	St Med Int Med Neur, OBG Path Ped Phys Med Psych Rad Surg
Bellevue Hospital Center Third Surg Div—N Y Univ Col of Med	M 59		6-8				10 Int	St Surg
Bellevue Hospital Center Third Div Dept of Path N Y Univ Col of Med	M 56 57 59		8				1 Int	St Path
Bellevue Hospital Center Third Div Dept of Ped—N Y Univ Col of Med	M 59		6				10 Int	St Ped
Bellevue Hospital Center Fourth Med Div—N Y Univ Col of Med			8				129 Res	Anes Derm, Int Med Neuro Surg, Ophth Ortho Surg Otol Surg Urol
Bellevue Hospital Center Fourth Surg Div—N Y Univ Post Graduate Med School			6 8				8 Int	St Surg
Beth El Hospital Linden Blvd and Rockaway Pkwy Brooklyn, 12		NPCorp	6	328	47	7	26 Int 35 Res	Rotating Anes Int Med OBG Path Ped Rad, Surg
Beth Israel Hospital 10 Nathan D Perlman Pl 3	L 59	NPCorp	4	367	40	14	20 Int 46 Res	Rotating Anes Int Med OBG, Path, Ped Plas Surg Rad Surg Urol
Bird S Coler Memorial Hospital and Home Welfare Island 17	M 58#	City	4- 6-8	1 882	28	21	41 Res	Int Med Phys Med
Booth Memorial Hospital 36 45 Main St Flushing 55		Church	6	206	49		6 Int 1 Res 3 Res	Rotating, Path Ophthal
Bronx Eye and Ear Infirmary 321 E Tremont Ave 57		NPCorp		58				
Bronx Hospital 1276 Fulton Ave 56		NPCorp	4	329	37	22	9 Int 35 Res	Rotating Int Med OBG Path Ped Rad Surg
Bronx Municipal Hospital Center Pelham Pkwy and Eastchester Rd 61	M 55	City	4-5-6-8	1 235	57	42	42 Int 226 Res	St Med St Surg St Ped Anes Int Med Neuro Surg Neur OBG Ophth Ortho Surg Path Ped Phys Med Psych Pul Dis Rad, Surg Thor Surg Urol
Brooklyn Eye and Ear Hospital 29 Greene Ave Brooklyn 38	M 60	NPCorp	6	137		6	14 Res	Ophth Otol
Brooklyn Hospital 121 de Kalb Ave Brooklyn 1	M 60	NPCorp	6	343	46	24	16 Int 29 Res	Rotating Int Med OBG Path Ped Rad Surg Urol
Brooklyn State Hospital 681 Clarkson Ave Brooklyn 3	L 60	State	6	3 952	3	1	20 Res	Psych
Brooklyn Womens Hospital 1393 Eastern Pkway Brooklyn 33		NPCorp		66	50	6	3 Res	Obg
City Hospital at Elmhurst 79 01 Broadway Elmhurst 73		City	4 6-8	814	44	63	36 Int 72 Res	Rotating St Surg Int Med OBG Ophth Otol Path Ped Psych Pul Dis Rad Surg Urol
Columbus Hospital 227 E 19th St 3		Church	1	329	31	18	14 Int 8 Res	Rotating Int Med Surg
Coney Island Hospital Ocean and Shore Pkway Brooklyn 35		City	4-6 8	567	31	57	40 Int 49 Res	Rotating Int Med OBG Path Ped Phys Med Surg
Creedmoor State Hospital 80 45 Winchester Blvd Queens Village 27		State	6	6 636	25	5	25 Res	Psych
Cumberland Hospital 39 Auburn Pl Brooklyn 5	M 60	City	4-6-8	307	26	38	13 Int 23 Res	Rotating St Surg St Ped Int Med, OBG Path Ped Rad Surg
Doctors Hospital 170 E End Ave 28		NPCorp	3	277	39	16	2 Res	Path
Flushing Hospital and Dispensary 44 14 Parsons Blvd, Flushing 55		NPCorp	4	312	49	13	12 Int 21 Res	Rotating Anes Int Med OBG Path Ped Rad Surg
Fordham Hospital Southern Blvd and Crotona Ave, 58		City	4-6-8	414	37	36	19 Int 30 Res	Rotating Int Med, Neur, OBG, Path Ped, Surg Urol
Francis Delafield Hospital 99 Ft Washington Ave 32	M 56#	City	3-6-8	285	49	12	43 Res	Int Med Gyn, Path Phys Surg Rad Surg Urol
French Hospital 330 W 30th St 1		NPCorp	6	241	35	13	10 Int 15 Res	Rotating Int Med OBG Surg, Urol

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
NEW YORK New York City—Continued								
Coldwater Memorial Hospital Welfare Island	M 56-59#	City	4 8	88	64	34	30 Res	Int Med Neur Path Phys Med
Gracie Square Hospital 420 E 76th St 21		NPCorp	2 6	174	20		8 Res	Psych
Grand Central Hospital 321 E 42nd St 17		NPCorp	6	170	44	24	15 Int 13 Res	Rotating Int Med OBG Surg
Greenpoint Hospital 300 Skillman Ave Brooklyn 11		City	4 8	251	45		12 Int 14 Res	Rotating OBG Path Surg
Harlem Eye and Ear Hospital 2660 Lexington Ave 35		NPCorp		47		3	5 Res	Ophth Otol
Harlem Hospital 132 Lenox Ave 37		City	4 5 8	795	42	63	49 Int *52 Res	Rotating Anes Int Med OBG Path Ped Surg
Headquarters First U S Army Governors Island		Army					1 Res	Public Health
Hillside Hospital 76-59 263rd St Glen Oaks		NPCorp		196		4	25 Res	Psych
Hospital for Joint Disease 1919 Madison Ave 35		NPCorp	4 6	398	42	10	6 Int 32 Res	Rotating Anes Gyn Int Med Ortho Surg Path Phys Med Surg
Hospital for Special Surgery 535 E 70th St 21		NPCorp	2 3	194	50	5	14 Res	Ortho Surg
House of St Giles the Cripple 1346 President St Brooklyn 13		NPCorp		44		2	3 Res	Ortho Surg
Jamaica Hospital 89th Ave-Van Wyck Expwy Jamaica 18		NPCorp	6	260	43	21	10 Int 10 Res	Rotating Int Med OBG Path Surg
Jewish Chronic Disease Hospital 88 E 49th St Brooklyn 3	L-60	NPCorp	4 5 6	767	31	32	24 Res	Int Med Ortho Surg Path Phys Med
Jewish Hospital 555 Prospect Pl Brooklyn 38	M-60	NPCorp	4 6	474	50	12	40 Int 77 Res	Rotating St Med St Ped Allergy Anes Card Dis Gastro Int Med OBG Ophth Ortho Surg Path Ped Rad Surg Urol
Jewish Memorial Hospital Broadway and 196th St 40		NPCorp	4 6	185	32	7	12 Int 4 Res	Rotating OBG Path Surg
Kew Gardens General Hospital 80-02 Kew Gardens Rd Kew Gardens 15		Corp	6	165	37		1 Res	Path
Kings County Hospital Center 451 Clarkson Ave Brooklyn 3	M-60	City	4 5 6 8	3 175	28	75	141 Int 239 Res	Rotating Mixed St Med St Path St Ped St Surg Anes Derm Gastro Int Med Neuro Surg Neur OBG Ophth Ortho Surg Otol Path Ped Phys Med Plas Surg Psych Pul Dis Rad Surg Thor Surg Urol
Knickerbocker Hospital<br70 Convent Ave 27		NPCorp	6	220	67	13	12 Int 20 Res	Rotating St Med St Surg Int Med Gyn Path Surg
Lebanon Hospital<br1650 Grand Concourse 57		NPCorp	6	260	50	18	14 Int 10 Res	Rotating St Surg Int Med OBG Path Rad Surg
Lenox Hill Hospital<br111 E 76th St 21	L-59	NPCorp	4 6	430	40	4	23 Int 34 Res	Rotating Anes Card Dis Int Med Neur OBG Ophth Path Ped Psych Rad Surg
Lincoln Hospital<br320 Concord Ave Bronx 54		City	4 6 8	394	37	56	18 Int 52 Res	Rotating Int Med OBG Path Ped Rad Surg Urol
Long Island College Hospital<br340 Henry St Brooklyn 1	M-60	NPCorp	4 5 6	401	42	15	24 Int 35 Res	Rotating Mixed St Med St Ped, St Surg Int Med Neuro Surg OBG Otol Path Ped Rad Surg Urol
Long Island Jewish Hospital<br270-05 76th Ave New Hyde Park	M-60	NPCorp	4 6	258	71	4	14 Int 25 Res	Rotating Anes Int Med OBG Path Ped Rad Surg
Lutheran Hospital<br22 Junius St Brooklyn 12		Church		152	35		8 Int	Rotating
Lutheran Medical Center<br4520 Fourth Ave Brooklyn 20		Church		206	46	29	11 Int 15 Res	Rotating Int Med OBG Path Ped Surg
Maimonides Hospital<br4802 10th Ave Brooklyn 19	M-60	NPCorp	6	522	39	23	36 Int 54 Res	Rotating Mixed St Med Anes Int Med OBG Path Ped Rad Surg Thor Surg Urol
Manhattan Eye Ear and Throat Hospital<br210 E 64th St 21		NPCorp	3	184	27	5	21 Res	Ophth Otol
Manhattan State Hospital<br Ward's Island 35		State	6	3 233	26		13 Res	Psych
Mary Immaculate Hospital<br152 11 89th Ave Jamaica 32		Church	4	306	37	16	8 Int 13 Res	Rotating Ob Path Ped Surg
Memorial Center for Cancer and Allied Diseases<br444 E 68th St 21	M 57#	NPCorp	4 6	513	52	55	117 Res	Anes Card Dis Int Med Path Rad Surg
Methodist Hospital<br50 Sixth St Brooklyn 15		Church	6	387	42	10	16 Int 30 Res	Rotating St Med St Ped St Surg Anes Int Med OBG Path Ped Rad Surg
Metropolitan Hospital<br1901 First Ave 29	M 58#	City	4 5 6 8	1 019	45	50	124 Res	Anes Int Med Neur OBG Ophth Ortho Surg Path Ped Phys Med Pul Dis Rad Surg Thor Surg Urol
Misericordia Hospital<br600 E 233rd St 66		Church	6	252	63	16	12 Int 12 Res	Rotating Int Med Ob Ped Surg
Montefiore Hospital<br210th St and Bainbridge Ave 67	M 56#	NPCorp	4 5 6	643	46	26	26 Int 105 Res	Mixed Anes Card. Dis Int Med Neuro Surg Neur Ophth Path Phys Med Plas Surg Pul Dis Rad Surg Thor Surg
Morrisania City Hospital<br168th St and Gerard Ave 52		City	4 6 8	471	32	31	18 Int 39 Res	Rotating Int Med OBG Path Ped Pul Dis Rad Surg Urol
Mother Cabrini Memorial Hospital<br611 Edgecombe Ave 32		Church		170	31	6	8 Int 3 Res	Rotating Surg
Mount Sinai Hospital<br11 E 100th St 29	M 56 L-60	NPCorp	3 4 5	1 032	54	26	26 Int 163 Res	Rotating Anes Card Dis Derm Gastro Int Med Neuro Surg Neur OBG Ophth Ortho Surg Otol Path Ped Phys Med Plas Surg Psych Rad Surg Urol
New York City Dept of Health<br125 Worth St 13		State					6 Res	Public Health
New York Eye and Ear Infirmary<br218 Second Ave 3	L-59	NPCorp	1	175		4	10 Res	Ophth Otol
New York Hospital<br525 E 68th St 21	M 57#	NPCorp	4 5 6	1 104	69	14	41 Int 150 Res	St Med St Path St Ped St Surg Anes Derm Int. Med Neuro Surg Neur OBG Ophth Otol Path Ped Plas Surg Psych Rad Surg Urol
New York Hospital-Westchester Division<br121 Westchester Ave White Plains	57M	NPCorp	6	350	69		14 Res	Psych

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
NEW YORK, New York City—Continued								
New York Infirmary Stuyvesant Square E and 15th St 3		NPCorp	4	190	47	21	7 Int 15 Res	Rotating Int Med, OBG, Ped, Surg
New York Medical College-Flower and Fifth Ave Hospitals 1 E 105th St, 29	M 58X	NPCorp		300	59	4	34 Res	Anes, Int Med, OBG, Path, Ped, Rad, Surg
New York Polyclinic Medical School and Hospital 345 W 50th St 19		NPCorp	4-6	342	42	23	12 Int 49 Res	Rotating Anes Gastro Int Med, OBG Ophth Ortho Surg Path Ped Rad Surg Urol
New York State Dept of Labor 80 Centre St, 13		State					1 Res	Occup Med
New York State Psychiatric Institute 722 W 168th St 32	M 56	State	6	173	25	3	30 Res	Psych
New York University Medical Center-University Hospital 303 E 20th St 3	M 59X	NPCorp	4 6	374	43		19 Res	Derm Int Med, Gyn, Path, Ped Allergy Psych, Rad
Presbyterian Hospital 622 W 168th St 32	M 56#	NPCorp	2-8 4 6	1,498	66	8	27 Int 253 Res	St Med St Surg St Path Anes Derm Int Med Neuro Surg Neur, OBG, Ophth Ortho Surg Otol Path Ped, Phys Med Plas Surg Psych, Rad Surg Urol
Presbyterian Hospital—Babies Hospital 622 W 168th St 32	M 56#	NPCorp					1 Res	Surg
Prospect Heights Hospital 773 Washington Ave Brooklyn 38		NPCorp		166	28	8	6 Int	Rotating
Queens Hospital Center 82 68 164th St Jamaica 32		City	4 6-8	1,363	38	53	34 Int 54 Res	Rotating Int Med OBG Ophth, Ortho Surg, Path Ped, Rad, Surg
Roosevelt Hospital 428 W 59th St 19	M 56	NPCorp	4-6	450	49	14	15 Int 60 Res	Mixed Allergy Int Med Gyn Otol Path Ped Allergy Ped Psych Rad Surg Urol
St Barnabas Hospital for Chronic Diseases 183rd St, and Third Ave 57		NPCorp	6	514	53	11	7 Res	Int Med Path
St Catherine's Hospital 143 Bushwick Ave Brooklyn 6		Church	6	282	40	10	10 Int 23 Res	Rotating Anes Int Med, OBG Path, Ped, Surg
St Charles Hospital 277 Hicks St Brooklyn 1		Church		50	100		4 Res	Ortho Surg
St Clare's Hospital 415 W 51st St 19		Church	6	438	45	34	16 Int 27 Res	Rotating St Med St Surg Anes Int Med, OBG, Path, Surg, Urol
St Francis Hospital 525 E 142nd St 54		Church	6	400	39	27	12 Int 5 Res	Rotating OBG Path
St John's Episcopal Hospital 480 Herkimer St Brooklyn 13		Church		265	34	14	12 Int 15 Res	Rotating Int Med OBG Path Ped Surg
St John's Long Island City Hospital 2501 Jackson Ave Long Island City 1		Church	6	205	41	12	16 Int 1 Res	Rotating Path
St Joseph's Hospital 327 Beach 19th St Far Rockaway 91		Church	1	207	16	10	4 Res	Anes
St Joseph's Hospital for Chest Diseases 525 E 143rd St 54		Church		335	36	5	6 Res	Pul Dis Thor Surg
St Luke's Hospital 421 W 113th St 25	M 56 60	NPCorp	3 4	561	60	17	21 Int 74 Res	Mixed St Ped Anes, Card Dis, Derm Int Med, Ophth Ortho Surg Otol, Path Ped, Plas Surg Psych, Rad Surg, Urol
St Mary's Hospital 1298 St Marks Ave Brooklyn 13		Church	1	235	36	18	8 Int 12 Res	Rotating Int Med OBG, Path, Ped Surg
St Vincent's Hospital 355 Bard Ave Staten Island 10		Church		252	37	7	8 Int 2 Res	Rotating, Ortho Surg Path
St Vincent's Hospital 153 W 11th St 11	M 59	Church	2	768	51	16	34 Int 87 Res	Rotating St Med, St Surg Anes Int Med Neuro Surg, OBG Ophth Path Ped Psych Rad Surg
Sea View Hospital 460 Brielle Ave Staten Island 14		City	4 8	1 468	73	28	25 Res	Ortho Surg, Path, Pul Dis, Thor Surg
Staten Island Hospital 101 Castleton Ave, Staten Island 1		NPCorp	6	215	39	7	8 Int 2 Res	Rotating Int Med Path
Sydenham Hospital 565 Manhattan Ave 27		City	4 6 8	220	31	21	9 Int 10 Res	Rotating Int Med OBG Surg
Triboro Hospital 82 68 164th St Jamaica 32		City	8			16	19 Res	Pul Dis Thor Surg
U S Naval Hospital Linden Blvd, St Albans 25		Navy	2 4- 6	1 190	92		18 Int 35 Res	Rotating Anes Int Med OBG Ophth, Path Pul Dis Rad Surg Thor Surg, Urol
U S Public Health Service Hospital Bay St and Vanderbilt Ave, Staten Island 4		USPHS	2 4 6	795	81		24 Int 48 Res	Rotating Anes Derm Int Med, Ophth Path, Psych, Rad Surg Urol
Unity Hospital 1545 St Johns Pl Brooklyn 13		NPCorp	6	210	25	11	8 Int 4 Res	Rotating OBG
Veterans Administration Hospital 800 Poly Place Brooklyn 9	M 60	VA	2 4 6	1,600	51		88 Res	Anes Gastro Int Med, Neuro Ophth, Ortho Surg Path Phys Med, Psych Pul Dis Rad Surg, Thor Surg Urol
Veterans Administration Hospital 130 W Kingsbridge Rd, Bronx 68		VA	2 5	1,376	59		143 Res	Anes Derm Int Med Neuro Surg Neur, Ophth Ortho Surg, Otol Path, Phys Med Plas Surg Psych Pul Dis Rad Surg Thor Surg Urol
Veterans Administration Hospital 1st Ave at E 24th St, 10	L 57	VA	2 4- 6	1,238	62	3	117 Res	Derm, Int Med Neur Ortho Surg Path Phys Med, Psych Rad Surg, Thor Surg, Urol
Woman's Hospital 141 W 109th St 25		NPCorp		190	55	1	16 Res	OBG
Wyckoff Heights Hospital 374 Stockholm St, Brooklyn, 37		NPCorp		270			8 Int 4 Res	Rotating Path Ped, Surg, OBG
Niagara Falls Mount St Mary's Hospital 515 Sixth St		Church	6	189	45	2	6 Int 1 Res	Rotating Path
Niagara Falls Memorial Hospital 621 Tenth St		NPCorp	3 6	336	60	8	13 Int	Rotating
Northport Veterans Administration Hospital		VA	2	2,488	47		6 Res	Psych
Ogdensburg St Lawrence State Hospital		State	6	1,895	28	10	10 Res	Psych
Oneonta Homer Folks Tuberculosis Hospital West Street		State	6	250	31	3	4 Res	Pul Dis, Thor Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
NEW YORK—Continued								
Orangeburg								
Rockland State Hospital		State	3	7 67[illegible]	20	5	40 Res	Psych
Perrysburg								
J N Adam Memorial Hospital		State	6	2[illegible]	7[illegible]	3	4 Res	Pul Dis
Port Chester								
High Point Hospital Upper King St		Corp		4[illegible]		4	4 Res	Psych
United Hospital 406 Boston Post Rd		NPCorp	6	237	36	9	8 Int 6 Res	Rotating Int Med Ob Path Surg
Port Jefferson								
St Charles Hospital		Church	1	100	37		2 Res	Ortho Surg
Poughkeepsie								
Hudson River State Hospital Station B		State	3	1 74[illegible]	6	8	1[illegible] Res	Psych
St Francis Hospital North Rd		Church		19[illegible]	39	6	6 Int 1 Res	Rotating Path
Vassar Brother Hospital Reade Place		NPCorp		218	33	8	8 Int 2 Res	Rotating Path
Queens Village—See New York City								
Ray Brook								
Ray Brook State Tuberculosis Hospital		State	6	292	[illegible]	[illegible]	2 Res	Pul Dis
Rhinebeck								
Astor Home for Children 36 Mill St		NPCorp		3[illegible]			1 Res	Psych
Rochester								
Eastman Kodak Company 343 State St		Corp					1 Res	Occup Med
Genesee Hospital 224 Alexander St 7	J 62	NPCorp	4 5	2[illegible]4	80	4	17 Int 26 Res	Rotating Mixed St Med St Surg St Path Anes Int Med OBG Path Ped, Rad Surg
Highland Hospital South Ave at Bellevue Dr 20	J 62	NPCorp	5	231	79	1	14 Int 1[illegible] Res	Rotating St Surg St Med Int Med OBG Surg
Monroe County-Iola Sanatorium 350 E Henrietta Rd 30		County		300	71		6 Res	Pul Dis
Rochester General Hospital 1125 Portland Ave 21	J 62	NPCorp	4 5	419	61	14	22 Int 40 Res	Rotating St Med St Surg Anes Int Med OBG Ortho Surg Path Ped Rad Surg
Rochester State Hospital 1600 South Ave 20		State	4 6	3 [illegible]8[illegible]	11	4	7 Res	Psych
St Mary's Hospital 89 Genesee St 11	J 63	Church	6	316	[illegible]4	22	1[illegible] Int 23 Res	Rotating Anes Gen Pract Int Med OBG Ophth Path Ped Rad Surg
Strong Memorial—Rochester Municipal Hospital 260 Crittenden Blvd 20	M 62X≠	NPCorp	4 5	77[illegible]	74	20	[illegible] Int 148 Res	Mixed St Med St Surg St Ped St Path St Ob Gyn Anes Int Med Neuro Surg OBG Ophth Ortho Surg, Otol Ped Allergy Path Ped Plas Surg Psych Rad Surg Urol
University of Rochester School of Medicine & Dentistry		NPCorp					Res	Occup Med
Rockville Centre								
Mercy Hospital							Res	OBG
Roslyn								
St Francis Hospital and Sanatorium Port Washington Blvd		Church		1[illegible]2	68	3	[illegible] Res	Card Dis
St Albans—See New York City								
Schenectady								
Ellis Hospital 1101 Nott St 8	J 63	NPCorp	6	471	66	22	18 Int 2[illegible] Res	Rotating Int Med OBG Ortho Surg Path Surg
Glenridge Hospital Glenridge Rd 2		County	5	122	27	1	3 Res	Pul Dis
St Clare's Hospital 600 McClellan St 3		Church		204	40	11	12 Int	Rotating
Staten Island—See New York City								
Sunmount								
Veterans Administration Hospital	J 87	VA	6	433	77	1	3 Res	Pul Dis Thor Surg
Syracuse								
General Hospital 116 E Castle St 3		NPCorp	6	120	32	6	6 Int 3 Res	Mixed OBG
St Joseph's Hospital 301 Prospect Ave 3	M 61	Church	6	304	44		12 Int 6 Res	Rotating Mixed Anes OBG Path
State University of New York Upstate Medical Center Hospitals 766 Irving Ave 10	M 61≠	NPCorp	5	1 600	83	2	40 Int 157 Res	Rotating Mixed St Med St Surg St Ped St Path Anes Int Med Neuro Surg Neur OBG Ophth Ortho Surg Otol Path Ped Plas Surg Psych Rad Surg Urol
Veterans Administration Hospital Irving Ave and University Pl 10	M 61≠	VA	[illegible]	488	70		43 Res	Int Med Ortho Surg Path Psych Pul Dis Rad, Surg Urol
Thiells								
Letchworth Village		State	6	4 293	84	2	2 Res	Psych
Troy								
Leonard Hospital 41—114th St		NPCorp		18[illegible]	31	7	8 Int	Rotating
St Mary's Hospital 87 Oakwood Ave		Church	1 6	222	36		6 Int	Rotating
Samaritan Hospital Peoples and Burdett Ave		NPCorp		20[illegible]	56	8	10 Int 1 Res	Rotating Path
Utica								
Utica State Hospital 1213 Court St 2		State	6	2 [illegible]13	34	9	1[illegible] Res	Path Psych
Valhalla								
Grasslands Hospital		County	4 6	490	58	3[illegible]	20 Int 40 Res	Mixed Anes Card Dis Int Med Path Ped Phys Med, Psych Rad Surg
West Brentwood								
Pilgrim State Hospital		State	5	14 890	30	13	2[illegible] Res	Psych
West Haverstraw								
New York State Rehabilitation Hospital Route 9W		State		204	30	3	4 Res	Ortho Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
NEW YORK—Continued								
White Plains								
White Plains Hospital 41 E Post Rd		NPCorp	6	198	41	6	8 Int 6 Res	Rotating Int Med Surg
Willard								
Willard State Hospital		State		3,025	14	5	10 Res	Psych
Wingdale								
Harlem Valley State Hospital		State	6	5,321	21	12	8 Res	Psych
Yonkers								
St John's Riverside Hospital 65 Ashburton Ave		NPCorp		207	28	7	9 Int 2 Res	Rotating, Path
St Joseph's Hospital 127 S Broadway		Church		174	44	9	8 Int	Rotating
Yonkers General Hospital 127 Ashburton Ave		NPCorp	6	145	34	5	7 Int 2 Res	Rotating Gen Pract
NORTH CAROLINA								
Asheville								
Memorial Mission Hospital 509 Biltmore Ave		NPCorp	2-6	329	26		8 Int	Rotating
Chapel Hill								
North Carolina Memorial Hospital Pittsboro Rd	M 63	State		350	82	8	36 Int 149 Res	Mixed St Med St Surg, St Ped, St Path Anes Card Dis, Derm, Gen Pract, Int Med Neur OBG Ophth Ortho Surg Otol, Path, Ped Psych Rad Surg Thor Surg Urol
Charlotte								
Charlotte Memorial Hospital 1400 Scott Ave 3		NPCorp	4 6	352	58	1	22 Res	Int Med, OBG Ortho Surg, Path Ped, Surg, Thor Surg Urol
Presbyterian Hospital 200 Hawthorne Lane 4		Church	6	404	45		2 Res	Path
Durham								
Duke Hospital	M 64X	NPCorp	4-8	603	65	32	58 Int 229 Res	Mixed St Med, St Surg, St Ped St Path St Ob Gyn Allergy, Anes Card Dis Derm, Gastro Int Med Neuro Surg, Neur, OBG, Ophth, Ortho Surg, Otol, Ped Allergy Path Ped, Plas Surg, Psych Pul Dis, Rad, Surg, Thor Surg Urol
Lincoln Hospital 1301 Fayetteville St	L 64	NPCorp		103	31	3	6 Res	OBG, Surg
McPherson Hospital 1110 W Main St		Indiv		45			6 Res	Ophth, Otol
Veterans Administration Hospital Fulton St and Erwin Rd	M 64#	VA	2-7 6	489	74	4	57 Res	Anes Int Med Neuro Surg Ophth, Ortho Surg, Otol, Path, Phys Med, Plas Surg, Psych Rad, Surg, Urol
Watts Hospital Broad St and Club Blvd	I 64	NPCorp	6	293	40	6	22 Int 18 Res	Rotating, Mixed, St Med St Surg St Ped St Ob Gn Int Med, Obg Path, Ped, Surg, Urol
Fort Bragg								
Womack Army Hospital		Army	4-6	450	86		16 Int 6 Res	Rotating Surg
Gastonia								
North Carolina Orthopedic Hospital Babington Heights		State	1 5	110			3 Res	Ortho Surg
Greensboro								
Moses H Cone Memorial Hospital 1200 N Elm St		NPCorp	2 3	293	61	1	16 Int 1 Res	Rotating Path
Oteen								
Veterans Administration Hospital		VA	2	1 003	66		10 Res	Pul Dis Thor Surg
Raleigh								
Dorothea Dix Hospital		State	6	2 813	41		8 Res	Psych
North Carolina State Board of Health		State					1 Res	Public Health
Rex Hospital 1311 St Mary's St		NPCorp	6	335	37	1	12 Int 4 Res	Rotating Obg Ped
Wilmington								
Babies Hospital Rt 3		NPCorp		75	64	1	2 Res	Ped
James Walker Memorial Hospital 10th and Rankin Sts		NPCorp	6	250	30	5	8 Int	Rotating
Winston-Salem								
City Memorial Hospital 1 Hospital St 4		City	6	294	45	1	14 Int 6 Res	Rotating Int Med Surg
Kate Bitting Reynolds Memorial Hospital 1101 E Seventh St, 4		City	2-6	176	22	1	9 Int 3 Res	Rotating Surg
North Carolina Baptist Hospital 300 S Hawthorne Rd 7	M 65#	Church	6	390	60	5	22 Int 58 Res	Mixed St Ped St Path, St Med, St Surg Anes Gastro, Int Med, Neuro Surg, Neur Obg, Ophth, Ortho Surg Otol Path, Ped, Rad Surg Urol
NORTH DAKOTA								
Bismarck								
Bismarck Hospital 323 6th St		Church	1	197	39	4	8 Res	Int Med Rad Surg
Fargo								
St John's Hospital 301 Sixth Ave South		Church		175	52	2	6 Int	Rotating
St Luke's Hospital 727 Broadway		NPCorp	6	185	52		8 Int 6 Res	Rotating Int Med Obg Surg
OHIO								
Akron								
Akron City Hospital 525 E Market St 9		NPCorp	6	519	54	10	24 Int 46 Res	Rotating Gen Pract, Int Med Obg, Ortho Surg Path Rad Surg Urol
Akron General Hospital 400 Wabash Ave 7		NPCorp		432	46		20 Int 51 Res	Rotating Gen Pract, Int Med Obg Ortho Surg Path Rad Surg
Mary Day Nursery and Children's Hospital Buchtel and Bowery Sts 8		NPCorp		260	79	3	18 Res	Ortho Surg Ped

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
OHIO Akron—Continued								
St Thomas Hospital 444 N Main St 10		Church	6	260	54	28	16 Int 22 Res	Rotating Gen Pract Int Med Obg Surg
Barberton								
Barberton Citizens Hospital Tuscora Park		NPCorp	1 6	235	43	7	12 Int 6 Res	Rotating Gen Pract Surg
Brecksville								
Veterans Administration Hospital 9548 Broadview Rd		VA	2	278	63		2 Res	Pul Dis
Canton								
Aultman Hospital 625 Clarendon Ave S W 10		NPCorp		503	39	34	20 Int 32 Res	Rotating Int Med Obg Path Rad Surg
Mercy Hospital 723 Market Ave N W 2		Church	6	408	44	26	12 Int 34 Res	Rotating Anes Int Med Obg Path Rad Surg
Cincinnati								
Bethesda Hospital Reading Rd and Oak St 6		Church	2	235	53	12	12 Int 9 Res	Rotating Mixed Obg Path
Children s Hospital Elland and Bethesda Ave 29	M 66#	Church	4	215	90	2	25 Res	Neuro Surg Ortho Surg Ped Surg
Christ Hospital 2139 Auburn Ave 19		NPCorp	3 6	356	46	2	21 Int 28 Res	Rotating St Surg Anes Gen Pract Int Med Neuro Surg Plas Surg Surg
Cincinnati General Hospital 3731 Burnet Ave 29	M 66X	City	4 5 6	766	64	16	52 Int 159 Res	Rotating Card Dis Derm Gastro Int Med Neuro Surg Neur Obg Ophth Ortho Surg Otol Path Ped Psych Rad Surg Urol
Daniel Drake Memorial Hospital Galbraith and Vine St 18	L-66#	County		85	52		6 Res	Int Med
Deaconess Hospital Clifton Ave and Straight St 19		Church	1 6	139	21	3	3 Res	Surg
Good Samaritan Hospital 3217 Clifton Ave 20		Church		591	47	36	19 Int 37 Res	Rotating St Surg Gen Pract Int Med Neuro Surg Obg Path Ped, Rad Surg
Jewish Hospital 3208 Burnet Ave 29		NPCorp	6	423	54	21	16 Int 34 Res	Rotating Int Med Ortho Surg Path Ped Rad Surg
Longview State Hospital Box 36 Zone 16		State	6	3 641	31	2	8 Res	Psych
National Lead Company of Ohio P O Box 158 Mt Healthy Station		Corp					1 Res	Occup Med
Rollman Receiving Hospital and State Institute of Psychiatry 3009 Burnet Ave 19		State		100			24 Res	Psych
St Mary s Hospital 816 Betts St 14		Church	6	194	21	2	12 Int 10 Res	Rotating Card Dis Int Med Surg
University of Cincinnati Institute of Industrial Health School of Arts & Sciences		NPCorp					Res	Occup Med
Veterans Administration Hospital 3200 Vine St 20	M 66#	VA	5 6	725	69		Res	Int Med Neuro Surg Ortho Surg Psych Surg Urol
Cleveland								
Cleveland Clinic Hospital 2020 E 93rd St 6		NPCorp	3	450	63	49	16 Int 138 Res	Rotating St Surg Anes Card Dis Derm Gastro Int Med Neuro Surg Neur Obg Ophth Ortho Surg Otol Path Ped Phys Med Psych Rad Surg Thor Surg Urol
Cleveland Metropolitan General Hospital 3395 Scranton Rd 9	M-67#	County	4	894	64	57	78 Int 110 Res	Rotating St Med St Surg St Ped Anes Derm Int Med Neuro Surg Obg Ophth Path Ped Pul Dis Rad Surg Thor Surg Urol
Cleveland Psychiatric Institute and Hospital 1708 Aiken Ave 9		State		350	55		24 Res	Psych
Evangelical Deaconess Hospital 4729 Pearl Rd 9		Church		217	45	24	12 Int 10 Res	Rotating Obg Path Surg
Fairview Park Hospital 18101 Lorain Ave 11		NPCorp		294	42	30	15 Int 27 Res	Rotating Anes Gen Pract Int Med Obg Surg
Highland View Hospital 4901 Ireland Dr 22	M 67#	County	4 6	624	47	7	21 Res	Int Med Phys Med
Huron Road Hospital 13951 Terrace Rd 12		NPCorp	3 6	434	55	21	12 Int 40 Res	Rotating Anes Int Med Obg Path Rad Surg Urol
Lutheran Hospital 3609 Franklin Blvd 13		Church	6	198	50	18	12 Int 21 Res	Rotating Int Med Obg Path Surg
Mount Sinai Hospital 1800 E 105th St 6		NPCorp	4	348	45	20	22 Int 45 Res	Rotating Anes Int Med Obg Ortho Surg Path Ped Rad Surg
Polyclinic Hospital 6606 Carnegie Ave 3		NPCorp		144	41	7	7 Res	Gen Pract
St Alexis Hospital 5163 Broadway 2		Church	6	294	39	20	8 Int 19 Res	Rotating Anes Int Med Path Surg
St Ann Hospital 2475 E Boulevard 20		Church	6	69	98	5	5 Res	Obg
St John s Hospital 7911 Detroit Ave 2		Church	6	268	33	19	7 Int 16 Res	Rotating Int Med Obg Surg
St Luke s Hospital 11311 Shaker Blvd 4		Church	4 6	468	49	5	24 Int 42 Res	Rotating Anes Int Med Obg Ortho Surg Otol Path Ped Rad Surg
St Vincent Charity Hospital 2222 Central Ave 15		Church	5 6	360	49	22	15 Int 19 Res	Rotating Anes Path Rad Surg
Sunny Acres Cuyahoga County Tuberculosis Hospital 4310 Richmond Rd 22	L 67#	County	6	466	47	4	3 Res	Pul Dis
University Hospitals 2065 Adelbert Rd 6	M-67#	NPCorp		928	70	9	45 Int 166 Res	Rotating St Med St Surg St Ped St Path Anes Card Dis Derm Int Med Neuro Surg Neur Obg Ophth Ortho Surg Otol Path Ped Psych Rad Surg Urol.
Veterans Administration Hospital 7300 York Rd 30	M-67#	VA	4 5 6	827	63		75 Res	Gastro Int Med Neuro Surg Ophth Ortho Surg Otol Path Rad Surg Thor Surg Urol
Woman s Hospital 1940 E 101st 6		NPCorp		160	30		8 Res	Gen Pract

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
OHIO—Continued								
Cleveland Heights								
Doctors Hospital 12345 Cedar Rd 6		NPCorp	6	200	40	23	8 Int 8 Res	Rotating, Gen Pract, Int Med
Columbus								
Benjamin Franklin Hospital 1755 Alum Creek Dr 7		County	6	300	47		2 Res	Thor Surg
Children's Hospital 17th St at Livingston Park 5	M 68#	NPCorp		235	85	7	37 Res	Ortho Surg, Otol, Path, Ped, Ped Allergy, Surg
Columbus Psychiatric Institute and Hospital 473 W 12th Ave 10	M 68X	State	2 6	126	100		24 Res	Psych
Columbus State Hospital 1960 W Broad St 15		State		2 797	54	3	45 Res	Psych
Grant Hospital 125 S Grant Ave 15		NPCorp	6	242	30	1	12 Int 3 Res	Rotating, Path
Mount Carmel Hospital 793 W State St 22		Church	2	409	52		18 Int 17 Res	Rotating Gen Pract Int Med, Obg Ortho Surg Surg
Ohio State University Medical Center		State					24 Res	Aviation Med Occup Med
Ohio Tuberculosis Hospital 466 W Tenth Ave 10	M 68X	State	4 6	177	86	4	10 Res	Pul Dis Thor Surg
St Ann's Hospital for Women 1555 Bryden Rd 9		Church		100	19		3 Res	Obg
St Anthony Hospital 1450 Hawthorne Ave 3		Church	6	293	25	7	7 Res	Gen Pract
University Hospitals 410 W Tenth Ave 10	M 68X	State	4-5	588	71	21	48 Int 191 Res	Rotating St Med St Surg Allergy Anes Card Dis Gastro Int Med Neuro Surg, Neur Obg Ophth Ortho Surg Otol Path Phys Med Plas Surg, Psych Pul Dis, Rad Surg Thor Surg Urol
White Cross Hospital 700 N Park St 8		Church	6	340	57	4	18 Int 26 Res	Rotating Card Dis Gen Pract Int Med, Neuro Surg Obg, Ortho Surg Path Surg
Dayton								
Good Samaritan Hospital 1425 W Fairview Ave 6		Church	6	435	47	13	10 Int 12 Res	Rotating Gen Pract, Int Med Obg Surg
Miami Valley Hospital 1 Wyoming St 9		NPCorp	1 6	679	48	8	16 Int 27 Res	Rotating Int Med Obg Path Rad, Surg
St Elizabeth Hospital 49 Hopeland St 8		Church	6	450	34	2	16 Int 1 Res	Rotating Surg
U S Air Force Headquarters Air Materiel Command, Wright Patterson Air Force Base		USAF					3 Res	Aviation Med, Occup Med
U S Air Force Hospital Wright Patterson Air Force Base		USAF	1 2-3 6	330	67		8 Res	Gen Pract
Veterans Administration Hospital 4100 W Third St	L 68	VA	2 6	823	74		48 Res	Int Med Path, Phys Med Rad Surg, Urol
Elyria								
Elyria Memorial Hospital 630 E River St		NPCorp		242	39	11	5 Int 12 Res	Rotating Gen Pract Ortho Surg, Path, Rad Surg
Euclid								
Euclid-Glenville Hospital E 185th St and Lake Erie 19		NPCorp		205	43	17	10 Int 10 Res	Rotating Gen Pract
Garfield Heights								
Marymount Hospital 12300 McCracken Rd 25		Church		190	47	19	12 Int 21 Res	Rotating Anes Int Med Obg Path, Surg
Hamilton								
Mercy Hospital 116 Dayton St		Church		300	39	30	12 Int 18 Res	Rotating Int Med, Obg Path, Surg
Lakewood								
Lakewood Hospital 14519 Detroit Ave 7		City		270	41	19	6 Int 11 Res	Rotating Int Med Surg
Lima								
Lima Memorial Hospital Linden and Mobel Sts		NPCorp	6	270	34	6	12 Int 12 Res	Rotating, Gen Pract, Int Med Surg
St Rita's Hospital 801 W High St		Church		291	45	8	12 Int 12 Res	Rotating Gen Pract, Int Med Obg, Path, Surg
Lorain								
St Joseph Hospital 2026 Broadway		Church	6	215	30	13	6 Int 4 Res	Rotating Path Rad
Mansfield								
Mansfield General Hospital 335 Glessner Ave		NPCorp		249	56	5	4 Res	Surg
Ravenna								
Robinson Memorial Portage County Hospital 449 S Meridian St		County		120	35		10 Res	Gen Pract
Springfield								
Mercy Hospital 1343 N Fountain Blvd		Church	6	305	46		9 Int	Rotating
Springfield City Hospital 2615 E High St		City	2-3	289	41		10 Int 1 Res	Rotating Path
Steubenville								
Ohio Valley Hospital 380 Summit Ave		NPCorp	1	210	32	9	7 Int 2 Res	Rotating Gen Pract
Toledo								
Flower Hospital 3850 Collingwood Blvd 10		Church	6	190	35	10	9 Int 1 Res	Rotating Surg
Maumee Valley Hospital 2025 Arlington Ave 9		County		235	35	11	6 Int 21 Res	Rotating Int Med Obg, Path, Surg
Mercy Hospital 2221 Madison Ave 2		Church		350	70	3	14 Int 12 Res	Rotating Obg Path, Ped, Surg
Riverside Hospital 1609 Summit St 11		NPCorp	6	175	42	4	8 Int	Rotating
St Charles Hospital Wheeling and Navarre Sts 5		Church	6	235	43	1	9 Int 4 Res	Rotating Gen Pract, Psych
St Vincent's Hospital 2213 Cherry St 8		Church	6	442	44	14	14 Int 15 Res	Rotating Gen Pract Int Med, Obg, Ortho Surg, Path Surg, Urol

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
OHIO Toledo—Continued								
Toledo Hospital 2142 N Cove Blvd 6		NPCorp	6	217	60	2	20 Int 15 Res	Rotating Anes Int Med Obg Path
Warren								
St Joseph's Riverside Hospital 1400 Tod Ave N W		Church	1	156	33	7	7 Res	Gen Pract
Trumbull Memorial Hospital 1350 E Market St		NPCorp	6	392	47	22	12 Int 22 Res	Rotating Int Med Obg Path Ped Surg
Worthington								
Harding Sanitarium 445 E Granville Rd		Corp	3	96			5 Res	Psych
Youngstown								
St Elizabeth Hospital 1044 Belmont Ave 4		Church	4	370	44	12	19 Int 35 Res	Rotating Anes Gen Pract Int Med Obg Path Rad Surg
Youngstown Hospital Oak Hill and Francis St 1 Gypsy Lane at Goleta Ave 4		NPCorp	6 8	836	65	35	24 Int 55 Res	Rotating Anes Gen Pract Int Med Ortho Surg Path, Proct Rad Surg
OKLAHOMA								
Norman								
Central State Griffin Memorial Hospital P O Box 151 1		State		3 173	24	3	12 Res	Psych
Oklahoma City								
Bone and Joint Hospital 600 N W 10th St 3		Corp	1 3	84	27		4 Res	Ortho Surg
Mercy Hospital-Oklahoma City General 601 N W 12th St 3		Church	2	222	38		10 Int	Rotating
St Anthony Hospital 1101 N W 9th St	J-61±	Church	6	415	37		12 Int 12 Res	Rotating Int Med Obg Ortho Surg Path Plas Surg Surg
State of Oklahoma Dept of Health 800 N E 13th St 4		State					2 Res	Public Health
University Hospitals 800 N E 13th St 4	M-60±	State	4	463	66	22	29 Int 179 Res	Rotating St Path Mixed Anes Card Dis Derm Gen Pract Int Med Neuro Surg Obg Neur Ophth Ortho Surg Otol Path Ped Psych Rad Surg Thor Surg Urol
Veterans Administration Hospital 921 N E 13th St 4	M-60±	VA	6	488	72		4 Int Res	St Med Anes Card Dis Derm Int Med Neur Ortho Surg Otol Path Psych Rad Surg Thor Surg Urol
Wesley Hospital 800 N W 12th St 3	J-61±	Part	3 6	207	52		8 Int 4 Res	Rotating Int Med Rad Surg
Tulsa								
Hillcrest Medical Center 1120 S Utica St 20		NPCorp	3	623	40	2	19 Int 21 Res	Rotating Obg Path Ped Surg
St Johns Hospital 1307 S Utica St 4		Church	3 6	640	42	1	12 Int 18 Res	Rotating Int Med Obg Path Ped Rad Surg
OREGON								
Eugene								
Sacred Heart General Hospital 711 E 12th Ave		Church	3	278	81		8 Int	Rotating
Portland								
Emanuel Hospital 2801 N Gantenbein Ave 17		Church	6	448	60	9	14 Int 16 Res	Rotating Int Med Obg Ortho Surg Path Surg
Good Samaritan Hospital 1015 N W 22nd Ave 10		Church	6	452	36	4	10 Int 17 Res	Rotating St Path Int Med Neuro Surg Path Surg
Portland Sanitarium and Hospital 939 S E 60th Ave 15		Church		214	37	1	9 Int	Rotating
Providence Hospital 00 N E 47th Ave 1		Church	6	389	64	5	12 Int 9 Res	Rotating Int Med Path Rad Surg
St Vincent Hospital 2347 N W Westover Rd 10		Church	6	480	9	19	12 Int 28 Res	Rotating Gen Pract Int Med Path Rad Surg
Shriners Hospital for Crippled Children N E 82nd and Sandy Blvd 20		NPCorp		80			2 Res	Ortho Surg
State of Oregon Dept of Health 1400 S W 5th Ave 1		State					1 Res	Public Health
University of Oregon Medical School Hospitals and Clinics 3181 S W Sam Jackson Park Rd 1	M-70±	State	4	411	65	13	39 Int 111 Res	Rotating Anes Derm Int Med Neuro Surg Neur Obg Ophth Ortho Surg Otol Path Ped Rad Surg Thor Surg Urol
Veterans Administration Hospital Sam Jackson Park 7	J-70±	VA	2	50	68		52 Res	Card Dis Gastro Int Med Neuro Surg Ortho Surg Otol Path Phys Med Pul Dis Surg Urol
Salem								
Oregon State Hospital Station A N E		State		3 051	29		12 Res	Psych
PENNSYLVANIA								
Abington								
Abington Memorial Hospital 1200 York Rd	J-73	NPCorp	4 5	375	2	4	12 Int 18 Res	Rotating Int Med Obg Path Rad Surg
Allentown								
Allentown Hospital 17th and Chew St		NPCorp	3	400	50	10	14 Int 16 Res	Rotating Int Med Obg Path Plas Surg Proct Surg
Allentown State Hospital Hanover and Quebec Sts		State	6	1 091	17	14	10 Res	Psych
Sacred Heart Hospital 4th and Chew Sts		Church	6	457	43	6	10 Int 13 Res	Rotating Int Med Obg Path Rad Surg
Altoona								
Altoona Hospital 700 Howard Ave		NPCorp	6	325	43		12 Int 6 Res	Rotating Gen Pract Obg Path Surg
Mercy Hospital 2601 Eighth Ave		NPCorp	6	164	23	2	4 Int	Rotating
Bethlehem								
St Lukes Hospital 801 Ostrum St		NPCorp	6	453	51	2	12 Int 12 Res	Rotating Int Med Obg Path Surg
Bradford								
Bradford Hospital 116 Interstate Pkwy		NPCorp		188	16	2	2 Res	Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
PENNSYLVANIA—Continued								
Bristol								
Lower Bucks County Hospital Bath Rd and Orchard Ave		NPCorp	2-3-6	222	54	3	8 Int 3 Res	Rotating Gen Pract
Bryn Mawr								
Bryn Mawr Hospital Bryn Mawr Ave		NPCorp	6	308	62	1	12 Int 19 Res	Rotating Int Med, Path, Rad, Surg
Butler								
Butler County Memorial Hospital E Brady St		NPCorp	4 5 6	245	20		6 Int	Rotating
Chester								
Chester Hospital 9th and Barclay Sts		NPCorp	4-6	267	55	6	8 Int 1 Res	Rotating Path
Coaldale								
Coaldale State Hospital		State		143			4 Res	Gen Pract
Coatesville								
Veterans Administration Hospital	L 74, M 75	VA	2-5	1,602	84		12 Res	Neur, Psych
Danville								
Danville State Hospital		State	6	2,697	19		2 Res	Psych
George F Geisinger Memorial Hospital		NPCorp	2 5	278	56		12 Int 42 Res	Rotating Anes Derm Gen Pract Int Med, Obg, Ophth, Ortho Surg Otol Path, Ped, Rad Surg
Darby								
Thomas M Fitzgerald-Mercy Hospital Lansdowne Ave and Bally Rd		Church	1-3-6	360	47		12 Int 13 Res	Rotating Obg Path, Rad
Eagleville								
Eagleville Sanatorium		NPCorp		214	43		3 Res	Pul Dis
Easton								
Easton Hospital 21st and Church Sts		NPCorp	6	246	57	4	10 Int 6 Res	Rotating Int Med, Surg
Elizabethtown								
State Hospital for Crippled Children		State	2-3	210			3 Res	Ortho Surg
Embreeville								
Embreeville State Hospital		State	3	806	8	5	12 Res	Psych
Erie								
Hamot Hospital 4 E 2nd St 6		NPCorp	6	326	41	11	10 Int 21 Res	Rotating Int Med, Ortho Surg Path, Rad, Surg, Urol
St Vincent's Hospital 232 W 25th St		NPCorp	6	395	53	5	10 Int 22 Res	Rotating Gen Pract, Int Med Obg, Path, Rad, Surg, Urol
Greensburg								
Westmoreland Hospital 532 W Pittsburgh St		NPCorp	6	264	34		4 Int	Rotating
Harrisburg								
Harrisburg Hospital Front and Mulberry Sts	M 71	NPCorp	4	514	57	4	24 Int 23 Res	Rotating Int Med Obg, Path Ped Surg, Urol
Harrisburg Polyclinic Hospital Third and Radnor Sts		NPCorp	2 3-6	453	48		18 Int 12 Res	Rotating Int Med Path Ped Surg
Harrisburg State Hospital Cameron and Maclay Sts		State	3	2,748		8	12 Res	Psych
Pennsylvania Dept of Health P O Box 90		State					2 Res	Occup Med Public Health
Hazleton								
Hazleton State Hospital E Broad St		State	6	181	10	3	4 Res	Surg
St Joseph Hospital N Church and 9th Sts		Church		200	11		2 Res	Surg
Johnstown								
Conemaugh Valley Memorial Hospital 1086 Franklin St		NPCorp	6	383	31	5	12 Int 8 Res	Rotating Anes Path
Mercy Hospital 1020 Franklin St		Church	3-6	244	30		6 Int	Rotating
Lancaster								
Lancaster General Hospital 555 N Duke St		NPCorp		570	50	1	12 Int 8 Res	Rotating Gen Pract Path
St Joseph Hospital 250 College Ave		Church	6	290	48	7	6 Int 8 Res	Rotating Gen Pract Path
Mayview								
Mayview State Hospital		State	6	3,330	4	1	12 Res	Psych
McKeesport								
McKeesport Hospital 1500 Fifth Ave		NPCorp	3 6	445	35		10 Int	Rotating
Natrona Heights								
Allegheny Valley Hospital 1300 Carlisle St		NPCorp	6	241	29		4 Int	Rotating
Norristown								
Montgomery Hospital Powell and Fornance Sts		NPCorp	2-6	220	42	6	6 Int 4 Res	Rotating Gen Pract, Path
Norristown State Hospital Standbridge and Sterigere Sts	I 74	State	6	5,168	30		12 Res	Psych
Sacred Heart Hospital 1130 DeKalb St		Church	3 6	208	36	5	6 Int 7 Res	Rotating Gen Pract Surg
Philadelphia								
Albert Einstein Medical Center York and Tabor Rds 41		NPCorp	4	710	49		39 Int 17 Res	Rotating Ortho Surg Ped Psych, Urol
Northern Division York and Tabor Rds 41	M 73					28	45 Res	Anes Int Med Obg, Path, Rad, Surg
Southern Division 1429 S Fifth St 47	M 71					17	25 Res	Anes Int Med Obg Path, Rad, Surg
Chestnut Hill Hospital 8835 Germantown Ave 18		NPCorp	2	135	73	1	6 Int 6 Res	Rotating Int Med Obg Path
Children's Hospital 1740 Bainbridge St 46	M 74#	NPCorp	5	164	84	22	33 Res	Ortho Surg, Ped Allergy, Path, Ped, Rad, Surg
Eastern Pennsylvania Psychiatric Institute Henry Ave and Abbottsford Rd 29	M 72 75	State	6	100			15 Res	Psych
Episcopal Hospital Front St and Lehigh Ave 25	M 72 73	NPCorp	4 5 6	460	44	12	13 Int 21 Res	Rotating Int Med Obg Path Rad Surg, Thor Surg, Urol
Frankford Hospital 4940 Frankford Ave 24		NPCorp		188	51	4	8 Int 9 Res	Rotating Int Med Obg Path Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
PENNSYLVANIA Philadelphia—Continued								
Friends Hospital Adams Ave and Roosevelt Blvd 24	L 62	NPCorp	2 3	190	38		8 Res	Psych
Germantown Dispensary and Hospital E Penn and Wister Sts 44	M 72 73	NPCorp		302	30	1	12 Int 19 Res	Rotating Int Med Obs Path Ped Rad Surg
Graduate Hospital of the University of Pennsylvania 19th and Lombard St 4	M 74X	NPCorp		350	61	19	12 Int 75 Res	Rotating Anes Card Dis Derm Gastro Gyn Int Med Neuro Surg Neur Ophth Ortho Surg Otlo Path Plas Surg Rad Surg Urol
Hahnemann Medical College and Hospital 230 N Broad St 2	M 74X	NPCorp	3 6	462	50	42	16 Int 102 Res	Rotating Anes Card Dis Derm Int Med Obs Ortho Surg Path Ped Psych Rad Surg Thor Surg Urol
Hospital of University of Pennsylvania 3400 Spruce St 4	M 74X	NPCorp	4	738	71	38	39 Int 213 Res	Rotating Allergy Anes Derm Gastro Int Med Neuro Surg Neur Obs Ophth Ortho Surg Otol Path Ped Phys Med Plas Surg Psych Pul Dis Rad Surg Urol
Hospital of the Women's Medical College of Pennsylvania 3300 Henry Ave 29	M 75X	NPCorp	3 6	197	67	10	22 Res	Int Med Obs Path Ped Rad Surg
Institute of the Pennsylvania Hospital 111 N 49th St 39	L 64	NPCorp		250	18		6 Res	Psych
Jeanes Hospital Hasbrook and Hartel Sts 11		Church	6	100	23		1 Res	Rad Surg
Jefferson Medical College Hospital 11th and Walnut Sts 7	M 72X	NPCorp	3 4 5	942	50	28	39 Int 115 Res	Rotating Anes Derm Gastro Int Med Neuro Surg Neur Obs Ophth Ortho Surg Otol Path Ped Psych Rad Surg Urol
Lankenau Hospital Lancaster Ave and City Line 1	M 72	NPCorp	6	341	68	3	14 Int 21 Res	Rotating Int Med Obs Path Surg
Memorial Hospital 800 Ridge Ave 28		NPCorp	6	176	29		6 Int	Rotating
Mercy Douglass Hospital 5000 Woodland Ave 4		NPCorp	6	241	41	12	8 Int 20 Res	Rotating Int Med Obs Path Psych Surg
Methodist Episcopal Hospital Broad and Wolf Sts 48	M 72	Church	6	231	30	4	8 Int 9 Res	Rotating Int Med Obs Surg
Mercordia Hospital 4th and Cedar Ave 43	M 72	Church	6	384	48		14 Int 10 Res	Rotating Int Med Obs Path Surg
Nazareth Hospital 8000 Holme Ave 1		Church	6	200	53		10 Int 7 Res	Rotating Int Med Rad Surg
Northeastern Hospital Allegheny Ave and Tulip St 4		NPCorp		150	37		6 Int	Rotating
Pennsylvania Hospital Eighth and Spruce Sts 7	M 74	NPCorp	5 6	407	65	3	18 Int 45 Res	Rotating Anes Card Dis Int Med Neur Ortho Surg Path Rad Surg Urol
Philadelphia General Hospital 34th and Curie Ave 4	M 72 73 74 75	City	4 5	1896	55	35	90 Int 120 Res	Rotating Anes Card Dis Derm Int Med Neur Obs Ophth Ortho Surg Path Ped Phys Med Psych Pul Dis Rad Surg Thor Surg Urol
Philadelphia Psychiatric Hospital Ford Rd and Monument Ave 1	L 64	NPCorp	6	150		2	25 Res	Psych
Philadelphia State Hospital Roosevelt Blvd 14		State	3 6	7071	5	1	40 Res	Psych
Presbyterian Hospital 51 N 39th St 4	M 74	Church	5 6	355	61	9	17 Int 39 Res	Rotating Anes Card Dis Int Med Obs Path Rad Surg, Thor Surg
St Agnes Hospital 1900 S Broad St 45		Church	3 6	343	25		8 Int	Rotating
St Christopher's Hospital for Children 2600 N Lawrence St 25	M 73X	NPCorp	4	100	91	6	23 Res	Ped
St Joseph's Hospital 16th and Girard Ave 30		Church	6 6	200	54	2	6 Int 3 Res	Rotating Surg
St Mary's Franciscan Hospital 1867 E Palmer St 25		Church	1	248	61		6 Int 15 Res	Rotating Gen Pract Surg
Shriners Hospital for Crippled Children Roosevelt Blvd and Pennypack Ck 15	L 63	NPCorp		100			4 Res	Ortho Surg
Skin and Cancer Hospital 804 Pine St 7	M 75	NPCorp		90		2	4 Res	Derm
Temple University Hospital 3401 N Broad St 40	M 75X	NPCorp	6	534	76	17	140 Res	Allergy Anes Card Dis Gastro Int Med Neuro Surg Obs Ophth Otol Path Ped Proct Psych Rad Surg Urol
U S Naval Hospital 17th and Pattison Ave 45		Navy	4 5 6	1000	58		16 Int 60 Res	Rotating Anes Derm Int Med Neur Obs Ophth Ortho Surg, Otol Path Ped Psych Rad Surg Urol
Veterans Administration Hospital University and Woodland Ave 4	M 72 73 74	VA	4	488	80		52 Res	Card Dis Int Med Ortho Surg Path Phys Med Rad Surg Urol
Wills Eye Hospital 1601 Spring Garden St 30	M 73 L 75	City		234			14 Res	Ophth
Woman's Hospital Preston and Parrish Sts 4		NPCorp	3 4	165	43	14	6 Int 6 Res	Rotating Obs Surg
Pittsburgh								
Allegheny General Hospital 320 E North Ave 12		NPCorp	3 6	578	46	12	18 Int 30 Res	Rotating Anes Int Med Neuro Surg Ortho Surg Path Ped Rad Surg Thor Surg Urol
Children's Hospital 125 DeSoto St 13	M 76#	NPCorp	4 6	210	83	15	33 Res	Neuro Surg Ortho Surg Path Ped Surg
Elizabeth Steel Magee Hospital Forbes and Halket 13	M 76#	NPCorp	6	360	57		15 Res	Int Med Obs
Eye and Ear Hospital 230 Lothrop St 13	M 76#	NPCorp	6	137	70		15 Res	Ophth Otol
Health Center Hospitals of the University of Pittsburgh School of Medicine 3941 O Hara St 13	M 76X	NPCorp	4 6	1082	70		13 Int Res	Rotating Card Dis Int Med Neuro Surg Ortho Surg Path Plas Surg Proct Rad Surg Thor Surg Urol
Mercy Hospital 1400 30 Locust St 19	M 76	Church	6	639	54	20	12 Int 48 Res	Rotating Anes Int Med Neuro Surg Obs Otol Path Rad Surg Urol

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
PENNSYLVANIA, Pittsburgh—Continued								
Montefiore Hospital 3459 Fifth Ave 13	M 76	NPCorp	4-5-6	321	57	17	15 Int 30 Res	Rotating Allergy, Anes, Int Med Ob Ophth Path, Rad Surg,
Pittsburgh Hospital 6635 Frankstown Ave 6		NPCorp	6	225	31	3	6 Int 3 Res	Rotating Int Med, Obg
Presbyterian Hospital Woman's Hospital 230 Lothrop St 13	M 76#	NPCorp	5 6	375	71	12	70 Res	Card Dis, Int Med, Neuro Surg Ortho Surg Path, Plas Surg Proct, Rad Surg, Thor Surg, Urol
St Clair Memorial Hospital 1000 Bower Hill Road 16		NPCorp		160			Res	Gen Pract
St Francis General Hospital and Rehabilitation Institute 405 45th St 1	M 76	NPCorp	5-6	683	41	16	22 Int 34 Res	Rotating Anes Card Dis, Int Med Neuro Surg, Obg, Ortho Surg Path, Psych, Rad Surg,
St John's General Hospital 3330 McClure Ave 12		NPCorp	6	203	30	3	5 Res	Gen Pract
St Joseph's Hospital and Dispensary 2117 E Carson St 3		Church	6	170	32		6 Int	Rotating
St Margaret Memorial Hospital 2651 46th St 1		Church	6	166	57	3	6 Int 5 Res	Rotating Int Med Obg, Path, Surg
Shadyside Hospital 5230 Centre Ave 32		NPCorp	2 3-6	376	63		10 Int 4 Res	Rotating Path
South Side Hospital S 20th and Jane Sts 3		NPCorp	5 6	336	40	1	9 Int 4 Res	Rotating Obg Path
University of Pittsburgh Graduate School of Public Health		NPCorp					Res	Occup Med
Veterans Administration Hospital Leech Farm Rd 6		VA	2 4	951	72		5 Res	Neur
Veterans Administration Hospital University Dr 10	M 76#	VA	2 4	1 122	63		48 Res	Allergy Int Med Ophth Ortho Surg Otol, Path, Phys Med Rad, Surg Urol
Western Pennsylvania Hospital 4800 Friendship Ave 24		NPCorp	5 4-6	560	57	7	18 Int 20 Res	Rotating Int Med, Ob Path Rad Surg
Western Psychiatric Institute and Clinic 3811 O Hara St 13	M 76#	NPCorp	4 6	150	100	3	45 Res	Psych
Westinghouse Bettis Atomic Power Division P O Box 1468 Zone 30		Corp					1 Res	Occup Med
Pottsville A C Milliken Hospital L Norwegian and Tremont Sts		Church		206	33	1	1 Res	Gen Pract
Reading Community General Hospital 115 N 6th St		NPCorp	6	181	60	6	4 Res	Gen Pract Path
Reading Hospital 6th and Spruce Sts		NPCorp	3 6	518	39	8	14 Int 36 Res	Rotating Anes Int Med Obg Ortho Surg Path Rad Surg
St Joseph's Hospital 215 N 12th St		Church	6	283	50	3	6 Int 5 Res	Rotating Path Surg
Sayre Robert Packer Hospital 200 S Wilbur Ave	M 71	NPCorp		340	62	13	12 Int 42 Res	Rotating Anes Int Med Ortho Surg Path Ped Rad Surg, Urol
Scranton Scranton State Hospital 201 Mulberry St 3		State	3 5 6	267	33	1	10 Int 1 Res	Rotating Path
Sewickley Sewickley Valley Hospital Blackburn Rd		NPCorp	6	230	42		8 Int	Rotating
Sharon Sharon General Hospital 710 E State St		NPCorp		285	31	5	8 Res	Gen Pract
South Mountain Samuel G Dixon State Hospital		State		1 050	19	1	4 Res	Pul Dis
Uniontown Uniontown Hospital 500 W Berkeley St		NPCorp	6	278	29	4	5 Int	Rotating
Warren Warren State Hospital Box 240		State	3-6	3 100	34		20 Res	Psych
Washington Washington Hospital 155 Wilson Ave		NPCorp	3	312	36		8 Int	Rotating
West Chester Chester County Hospital 500 E Marshall St		NPCorp	2 4 6	189	35		6 Int	Rotating
Wilkes-Barre Mercy Hospital 196 Hanover St		NPCorp		193	26	2	4 Int 2 Res	Rotating Surg Urol
Wilkes Barre General Hospital N River and Auburn Sts		NPCorp	3 6	376	32	3	10 Int 4 Res	Rotating Path Surg Urol
Wilkinsburg Columbia Hospital 312 Penn Ave 21		NPCorp	6	275	32	4	6 Int 2 Res	Rotating Surg
Williamsport Williamsport Hospital 777 Rural Ave		NPCorp	6	312	43	2	8 Int 7 Res	Rotating Path Surg
York York Hospital S George St and Rathton Rd		NPCorp	2 3 6	364	53	1	10 Int 8 Res	Rotating Path Surg
PUERTO RICO								
Aguadilla Aguadilla District Hospital		State		280	68		10 Int 1 Res	Rotating Path
Arecibo Arecibo District Hospital Lares Rd		State		280	65	1	15 Int Res	Rotating Gen Pract Path
Bayamon Puerto Rico Institute of Psychiatry P O Box 127		NPCorp		275			3 Res	Psych
Caparra Heights University Hospital Caparra Heights Station	M 77#	State		240	54	1	16 Int 28 Res	Rotating, Int Med Obg, Ophth Path Ped Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
PUERTO RICO—Continued								
Fajardo								
Fajardo District Hospital General Valero Ave		State		280			12 Int	Rotating
Hato Rey								
Hospital Auxilio Mutuo Munoz Rivera St		NPCorp		150	37		4 Res	Gen Pract
Ponce								
Hospital De Damas Concordia St		Church	6	1,3	38		7 Int 5 Res	Rotating Anes Surg
Ponce District General Hospital Machuelo		State	6	412	65		16 Int 23 Res	Rotating Int Med Obg Path Ped, Surg
Rio Piedras								
Psychiatric Center for Training and Research Box 47		State	6	1,00	9		18 Res	Psych
Rio Piedras								
Rio Piedras Municipal Hospital Pinero St		City		218	24		13 Int	Rotating
San Juan								
Presbyterian Hospital Ashford Ave		NPCorp	6	180	28	1	8 Int	Rotating
San Juan City Hospital De Diego Ave 34	M 77	City		3,6	71		24 Int 61 Res	Rotating Anes Int Med Obg Ophth Otol, Path Ped Surg Urol
Veterans Administration Hospital San Patricio	M 77	VA	6	200	85		21 Res	Int Med Path Phys Med Rad Surg
Santurce								
Dr I Gonzalez Martinez Oncologic Hospital 229 Parque St		NPCorp	6	6	94		13 Res	Path Rad Surg
RHODE ISLAND								
Howard								
State Hospital for Mental Diseases Box 5		State		3,32		10	13 Res	Psych
Newport								
Newport Hospital Friendship St		NPCorp	6	278	31	5	8 Int 4 Res	Rotating Gen Pract Int Med Path
U S Naval Hospital 3rd and Cypress Sts		Navy	6	6,3			6 Int	Rotating
Pawtucket								
Memorial Hospital Prospect St		NPCorp	6	22,5	37	6	8 Int 6 Res	Rotating Gen Pract Int Med Path
Providence								
Butler Health Center 333 Grotto Ave 6		NPCorp	6	60	25		2 Res	Psych
Charles V Chapin Hospital 153 Eaton St 8		City	6	249	58	8	5 Res	Ped Psych
Miriam Hospital 164 Summit Ave 6		NPCorp	6	160	38	3	8 Int 2 Res	Rotating Card Dis Int Med
Providence Lying in Hospital 50 Maude St 8	I 40 M 41	NPCorp	6	214	33		Res	Obg
Rhode Island Hospital 593 Eddy St 2		NPCorp	3 4 6	640	40	17	20 Int 68 Res	Rotating Anes Card Dis Int Med Obg Ortho Surg Otol Ped Allergy Path Ped Rad Surg Urol
Roger Williams General Hospital 825 Chalkstone Ave 8		NPCorp	1	2,9	30	5	10 Int 1 Res	Rotating Rad
St Joseph's Hospital 21 Peace St 7		Church	4	316	24	13	11 Int	Rotating
Veterans Administration Hospital Davis Park 8		VA	6	393	57		14 Res	Int Med Surg
Riverside								
Emma Pendleton Bradley Hospital 1011 Veterans Memorial Pkwy 15		NPCorp	2	56			4 Res	Psych
Woonsocket								
Woonsocket Hospital 115 Cass Ave		NPCorp		203	21	5	6 Res	Gen Pract
SOUTH CAROLINA								
Charleston								
Medical College South Carolina Teaching Hospitals 16 Lucas St 16	M 78	State	3 6	686	49		32 Int 70 Res	Rotating Anes Int Med Neur Obg Ophth Ortho Surg Path, Ped Psych Rad Surg Urol
U S Naval Hospital Naval Base		Navy	2 6	3,0			6 Int	Rotating
Columbia								
Columbia Hospital 2800 Hampton St 4		County	6	503	28		15 Int 12 Res	Rotating Int Med Obg Ortho Surg Ped Surg
Florence								
McLeod Infirmary 121 W Cheves St		NPCorp	2 3 6	209	32		6 Int	Rotating
Greenville								
Greenville General Hospital 100 Mallard St		NPCorp	3 4 6	550	35		24 Int 19 Res	Rotating Gen Pract Obg Ortho Surg Path Ped Surg
Shriners Hospital for Crippled Children 2100 N Pleasantburg Dr		NPCorp		60			3 Res	Ortho Surg
Orangeburg								
Orangeburg Regional Hospital 530 Carolina Ave N E		County	2 3 6	219	25		4 Int 2 Res	Rotating Urol
Spartanburg								
Spartanburg General Hospital 855 N Church St		County	2 3 6	370	28		15 Int 10 Res	Rotating Path Surg

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SOUTH DAKOTA								
Sioux Falls								
McKennan Hospital 800 L 21st St	M 79	Church	3-6	224	41	6	7 Int Res	Rotating Gen Pract
Sioux Valley Hospital 1123 S Lucile	M 79	NPCorp	6	210	40	6	7 Int 4 Res	Rotating Gen Pract, Path
Yankton								
Sacred Heart Hospital West 4th St	M 79	Church		208	25	5	5 Int 4 Res	Rotating, Obg Surg
TENNESSEE								
Chattanooga								
Baroness Erlanger Hospital 261 Wiehl St 3		CyCo	5	489	38	29	14 Int 47 Res	Rotating Anes, Int Med, Obg, Ortho Surg, Path, Rad, Surg
Memorial Hospital 2500 Citico Ave 4		Church		184	31	7	6 Res	Obg Surg
Newell Hospital 707 Walnut St 11		Corp	1	50	23	2	3 Res	Surg
T C Thompson Children's Hospital 1001 Glenwood Dr 6		CyCo		100	18		2 Res	Ped
Kingsport								
Holston Valley Community Hospital W Ravine St		NPCorp		306	40	1	8 Int	Rotating
Knoxville								
East Tennessee Baptist Hospital 201 Blount Ave 20		Church	6	267	33	14	12 Int 3 Res	Rotating Ortho Surg, Path
East Tennessee Children's Hospital 1912 Laurel Ave 16		NPCorp		62			Res	Ortho Surg
Fort Sanders Presbyterian Hospital 1909 W Clinch Ave 16		Church	6	179	30	6	8 Int	Rotating
St Mary's Memorial Hospital Oak Hill Ave 17		Church	1-6	350	37	20	12 Int 13 Res	Rotating Gen Pract, Int Med, Ortho Surg Path Surg
University of Tennessee Memorial Research Center and Hospital Alcoa Highway 20		State	3 4	265	46		14 Int 26 Res	Rotating Anes, Gen Pract, Int Med, Obg Ortho Surg, Path, Ped, Surg, Thor Surg,
Memphis								
Baptist Memorial Hospital 899 Madison Ave 3	I 80	Church	6	874	41	6	20 Int 41 Res	Rotating, Int Med, Neuro Surg, Obg, Path Ped, Rad, Surg, Urol
Campbell Clinic and Hospital 869 Madison Ave 3		Corp	1-6	80	30		14 Res	Ortho Surg
City of Memphis Hospitals 860 Madison Ave 3	M 80#	City	4	703	68	9	48 Int 98 Res	Rotating Anes Int Med, Neuro Surg Neur Obg Ophth, Otol, Path, Ped, Ped Allergy, Plas Surg Rad, Surg Thor Surg Urol
Gailor Psychiatric Hospital 42 N Dunlap St 3	L 80	State	6	61		2	10 Res	Psych
Le Bonheur Children's Hospital 848 Adams Ave 3	L 80	NPCorp	6	96	52		4 Res	Ped
Memphis Eye Ear Nose and Throat Hospital 1060 Madison Ave 4		Church	6	70	10		3 Res	Ophth
Methodist Hospital 1265 Union Ave 4		Church	1-3 6	381	30	1	15 Int 19 Res	Rotating Int Med Path Ped Rad, Surg
St Joseph Hospital 264 Jackson 5		Church	3	280	35	6	12 Int 10 Res	Rotating Int Med Obg Path Ped Surg
Veterans Administration Hospital Park Ave and Getwell St 15	I 80	VA	2 5 6	1 358	81	1	65 Res	Gastro, Int Med, Ophth, Ortho Surg Otol Path Phys Med Pul Dis Rad, Surg, Thor Surg Urol
West Tennessee Tuberculosis Hospital 842 Jefferson Ave 5	L 80	State	6	400	65	4	7 Res	Pul Dis, Thor Surg
Nashville								
Baptist Hospital 2000 Church St 4		Church		335	38	11	16 Int 25 Res	Rotating Int Med Obg Path Ped Surg
George W Hubbard Hospital 1005 18th Ave N 8	M 81	Church	6	197	52		14 Int 33 Res	Rotating Int Med, Ob Path Ped Surg Urol
Nashville General Hospital Hermitage Ave 10		City	6	202	29	12	12 Int 9 Res	Rotating Int Med Obg Path
St Thomas Hospital 2000 Hayes St 4		Church	6	237	38	10	16 Int 22 Res	Rotating, Mixed Int Med Obg Path, Surg,
State of Tennessee Dept of Health Cordell Hull Bldg 3		State					Res	Public Health
Vanderbilt University Hospital 1161 21st Ave S 5	M 82X	NPCorp	6	388	59	11	35 Int 94 Res	St Med, St Surg St Ped St Path, Anes Int Med Neuro Surg Neur Obg Ophth Ortho Surg Path Ped, Psych Rad Surg Thor Surg Urol
Veterans Administration Hospital 90 White Bridge Rd 5	I 82	VA	2-6	520	60		24 Res	Int Med Pul Dis, Rad Surg
Oak Ridge								
Oak Ridge Institute of Nuclear Studies Medical Division Vance Rd P O Box 117		NPCorp	6	30	86	11	3 Res	Int Med Path
TEXAS								
Austin								
Austin State Hospital 4110 Guadalupe 61		State		2,800	65		30 Res	Psych
Brackenridge Hospital 15th and East Ave 1	L 84	City	2-3 6	258	43		14 Int 14 Res	Rotating, Path Rad Surg
State of Texas Dept Health Brooks Air Force Base		State					2 Res	Public Health
U S A F School of Aviation Medicine		USAF					Res	Aviation Med
Corpus Christi								
Driscoll Foundation Children's Hospital 3533 S Alameda P O Box 6038		NPCorp	6	111	91	7	7 Res	Ped
Memorial Hospital 2606 Hospital Blvd		CyCo	2-3-6	258	34		7 Int	Rotating
Dallas								
Baylor University Medical Center 3500 Gaston Ave 10	L 83	Church	6	588	47	16	21 Int 51 Res	Rotating, St Med St Surg Int Med OBG Ortho Surg Path, Phys Med, Plas Surg, Proct Rad Surg, Thor Surg Urol

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
TEXAS Dallas—Continued								
Children's Medical Center 2300 Welborn St 19	M 83	NPCorp	4 5 6	127	76	1	4 Int 20 Res	St Ped Ped Allergy Ped
Gaston Hospital 3600 Gaston Ave 10		NPCorp		105	33	3	4 Res	Surg
Methodist Hospital 301 W Colorado Blvd 22	I 83	Church	6	288	30	3	16 Int 16 Res	Rotating Int Med OBG Path Surg
Parkland Memorial Hospital 5201 Hines Blvd 35	M 83	Dist	4 5	838	44	8	42 Int 134 Res	Rotating St Med St Path Anes Int Med Neur OBG Ophth Ortho Surg Otol Path Psych Pul Dis Rad Surg Thor Surg Urol
St Paul Hospital 3121 Bryan St 4	I 83	Church	6	346	56	10	12 Int 29 Res	Rotating Int Med OBG Path Rad Surg
Texas Scottish Rite Hospital for Crippled Children 2201 Welborn 19		NPCorp		70			3 Res	Ortho Surg
Timberlawn Sanitarium 4600 Samuell Blvd 21	M 83	Corp	2 6	110			8 Res	Psych
Veterans Administration Hospital 4500 S Lancaster Rd 16	I 83	VA	1	673	82		12 Int 56 Res	St Med Int Med Ophth Ortho Surg Otol Path Pul Dis Rad Surg Thor Surg Urol
El Paso								
Hotel Dieu Sisters Hospital 1014 N Stanton St		Church	1	231	43	7	8 Int 2 Res	Rotating Ortho Surg
R E Thomason General Hospital 4815 Alameda Ave		CyCo	6	240	79	9	8 Int	Rotating
William Beaumont General Hospital 2600 Hayes Ave		Army	1 3 4 6	533	87		28 Int 34 Res	Rotating Int Med OBG Ortho Surg Path Ped Surg
Fort Hood								
U S Army Hospital		Army		292			Res	Surg
Fort Worth								
Harris Hospital 1200 W Cannon St 4		Church	3 6	394	36	1	11 Res	Anes Int Med OBG Path Surg
John Peter Smith Hospital 1500 S Main St 4		CyCo	3 4	208	40	1	13 Int	Rotating
St Joseph Hospital 1401 S Main St 4		Church	2 3	370	38		17 Int 4 Res	Rotating Path
Galveston								
St Mary's Infirmary 715 Market St	I 84	Church	2 6	217	31		4 Res	Gen Pract
University of Texas Medical Branch Hospital 8th and Mechanic St	M 84X	State	5 6	884	64		37 Int 166 Res	Rotating St Med St Path Anes Card Dis Derm Int Med Neuro Surg OBG Ophth Ortho Surg Otol Path Ped Plas Surg Psych Rad Surg Thor Surg Urol
U S Public Health Service Hospital 40th St and Ave N 1	I 84	USPHS		161			Res	Gen Pract
Houston								
Hermann Hospital 1203 Rosine Sterling Ave 25	M 85	NPCorp	2 3 6	675	53	2	18 Int 56 Res	Rotating Anes Int Med OBG Ophth Ortho Surg Path Ped Rad Surg Urol
Baylor University College of Medicine Affiliated Hospital *Jefferson Davis Hospital* 1801 Buffalo Dr 3	M 85±	CyCo	4 6	398	44	5	3 Res 40 Int 115 Res	Derm Rotating St Med St Surg St Ped Anes Int Med Neuro Surg Neuro OBG Ophth Ortho Surg Otol Path Ped Plas Surg Psych Rad Surg Thor Surg Urol
Memorial Hospital 602 Lamar Ave 2		Church		446	35	6	8 Int 12 Res	Rotating Gen Pract Int Med Path
Methodist Hospital 6516 Bertner Ave 25	M 85±	Church	6	370	70	9	15 Int 29 Res	Rotating St Med St Surg Anes Int Med Neuro Surg Neur OBG Otol Path Ped Plas Surg Psych Rad Surg Thor Surg Urol
St Joseph's Hospital 1140 Crawford St 2		Church	1	430	58	18	17 Res	Anes Int Med OBG Path Ped Rad Surg
St Luke's Episcopal Hospital 6720 Bertner St 25	L 85	Church		291	48	9	10 Res	Int Med OBG Path Surg
Southern Pacific Hospital 2015 Thomas St 9		NPCorp		130			Res	Surg
Texas Children's Hospital 6621 Fannin St 25	M 85±	NPCorp		100	89	1	1 Int 10 Res	St Path Path Ped Ped Allergy Surg
University of Texas M D Anderson Hospital and Tumor Institute 6723 Bertner St 25	L 85	State		280	76	27	37 Res	Anes Gyn Int Med Path Rad Surg
Veterans Administration Hospital 2002 Holcombe Blvd 31	M 85±	VA	2 4 6	1 252	81	1	113 Res	Anes Int Med Neuro Surg Neur Ophth Ortho Surg Otol Path Phys Med Psych Pul Dis Rad Surg Thor Surg Urol
Lubbock								
Methodist Hospital 3615 19th St		Church		250	40		4 Res	Path
McKinney								
Veterans Administration Hospital	I 83	VA	2	270	71		5 Res	Int Med Path
Midland								
Midland Memorial Hospital		NPCorp		151			Res	Gen Pract
San Antonio								
Baptist Memorial Hospital 215 Camden St 5	I 84	Church		290	45	18	10 Int 12 Res	Rotating Gen Pract OBG Path Rad
Brooke General Hospital Fort Sam Houston 9		Army	2 4 5	900	88		30 Int 99 Res	Rotating Anes Card Dis Derm Gastro Int Med OBG Ophth Ortho Surg Otol Path Ped Plas Surg Rad Surg Urol.
Robert B Green Memorial Hospital 515 Morales St 7	L 84	Dist	4 5 6	280	57	18	24 Int 35 Res	Rotating Int Med OBG Ophth Path Ped Plas Surg Rad Surg
Santa Rosa Hospital 745 W Houston St 7		Church	6	522	53	21	12 Int	Rotating
U S Air Force Hospital Lackland Air Force Base		USAF	1 2 3 4 5	1 000	90		10 Res 36 Int 75 Res	Gen Pract Path Ped Plas Surg Rad Rotating Anes Gastro Gen Pract Int Med OBG Ophth Ortho Surg Path Ped Rad Surg Urol
Temple								
Scott and White Memorial Hospital 213 W Avenue G	•••	NPCorp	6	396	52	13	8 Int 33 Res	Rotating Anes Int Med Ophth Ortho Surg Path Rad Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
TEXAS, Wichita Falls—Continued								
Wichita Falls								
U S Air Force Hospital Sheppard Air Force Base		USAF		300	85		2 Res	Surg
UTAH								
Ogden								
St Benedict's Hospital 3000 Polk Ave		Church	2-6	170	59	1	10 Int 5 Res	Rotating Gen Pract Path
Thomas D Dee Memorial Hospital 2440 Harrison Blvd		Church		225	64		12 Int 13 Res	Rotating Gen Pract, Int Med OBG Path Surg
Salt Lake City								
Dr W H Groves Latter Day Saints Hospital 325 8th Ave 3	I 86	Church	3-6	425	49	7	21 Int 40 Res	Rotating Gen Pract Int Med OBG Ortho Surg Path Plas Surg Rad Surg Thor Surg
Holy Cross Hospital 1041 F First South St 2	I 86	Church	3 6	198	49	2	8 Int 9 Res	Rotating Int Med OBG Path Rad Surg
Primary Children's Hospital 320 Twelfth Ave 3		Church		72	71	1	2 Res	Ortho Surg
St Mark's Hospital 803 N Second West St 16	I 86	Church	3 6	248	61		12 Int 2 Res	Rotating Int Med Surg
Salt Lake County General Hospital 2033 S State St 15	M 86≠	County	6	298	69	14	35 Int 55 Res	Rotating St Med St Surg St Ped Anes Int Med OBG Ortho Surg, Path Ped Psych Rad Surg
Shriner's Hospital for Crippled Children Fairfax Ave at Virginia St, 3	I 86	NPCorp	6	60	67		2 Res	Ortho Surg
Veterans Administration Hospital 500 Foothill Dr 13	M 86≠	VA	-	710	90	4	Int 32 Res	Rotating St Med St Surg Int Med Neur Ortho Surg Path Psych Rad Surg
VERMONT								
Brattleboro								
Brattleboro Retreat 75 Linden St	I 87	NPCorp	6	786	8	4	6 Res	Psych
Burlington								
DeGoesbriand Memorial Hospital Pearl and Prospect Sts	M 87≠	Church	6	182	55	1	9 Int Res	Rotating Anes Int Med Neuro Surg Neur, OBG Otol, Path Ped Rad Surg Urol
Mary Fletcher Hospital Colchester Ave	M 87≠	NPCorp	4	217	76	11	14 Int 50 Res	Rotating Anes Int Med Neuro Surg Neur OBG, Otol Path Ped Rad Surg Urol
Waterbury								
Vermont State Hospital 103 S Main St	I 87	State	3 6	1115	21	3	5 Res	Psych
White River Junction								
Veterans Administration Hospital N Hartland Rd	M 51	VA	2	188	90		50 Res	Anes Int Med Neuro Surg Ortho Surg Surg Urol
VIRGINIA								
Alexandria								
Alexandria Hospital 709 Duke St		NPCorp	6	190	42	6	10 Int 10 Res	Rotating Int Med OBG Ped Surg
Arlington								
Arlington Hospital 5129 N 16th St 9	M 19	NPCorp	3-6	250	57	4	2 Res	OBG
National Orthopedic and Rehabilitation Hospital 2455 Army Navy Dr, 2		NPCorp		89			Res	Ortho Surg
Charlottesville								
Blue Ridge Sanatorium	I 88	State	1-3 6	382	43		1 Res	Pul Dis
University of Virginia Hospital	M 88≠	State	6	485	3	7	34 Int 106 Res	Rotating Mixed St Med St Surg Allergy Anes Derm Int Med, Neuro Surg Neur, OBG Ophth Ortho Surg Otol Path, Ped, Plas Surg, Psych Rad Surg Thor Surg Urol
Clifton Forge								
Chesapeake and Ohio Railway Employes Hospital Ridgeway St		NPCorp	6	205	42	6	18 Res	Int Med Surg
Danville								
Memorial Hospital 142 S Main St		NPCorp	6	275	53	2	7 Res	Path Urol
Fort Belvoir								
Dewitt Army Hospital		Army		324	84		6 Res	Surg
Lynchburg								
Lynchburg General Hospital Tate Springs Rd		NPCorp	6	222	32	1	3 Res	Path Surg
Newport News								
Mary Immaculate Hospital Blair and Buxton Aves		Church	1	150	39	4	5 Int	Rotating
Riverside Hospital 245 50th St		NPCorp	6	218	35	14	10 Int 10 Res	Rotating Gen Pract Int Med OBG Path Surg
Norfolk								
DePaul Hospital Kingsley Lane and Granby St 5		Church	6	306	75	11	12 Int 21 Res	Rotating Gen Pract Int Med OBG Path Rad, Surg
Norfolk Community Hospital 2539 Corprew Ave 4		NPCorp	6	115	30		4 Res	Gen Pract
Norfolk General Hospital West Olney Rd 7		NPCorp	6	320	43	8	20 Int 28 Res	Rotating Gen Pract Int Med OBG Path Rad, Surg
U S Public Health Service Hospital 6500 Hampton Blvd, 8		USPHS	2 4 6	231	59		8 Int 6 Res	Rotating Gen Pract
Petersburg								
Central State Hospital Box 271	L 89	State		1,196			Res	Psych
Petersburg General Hospital Mount Erin and Adams Sts		NPCorp	6	304	37	10	12 Int	Rotating
Portsmouth								
Maryview Hospital 200 County Rd		Church		210	35		8 Int	Rotating
Portsmouth General Hospital 900 Leckie St at Fort Lane		NPCorp	6	190	30		6 Res	Gen Pract

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
VIRGINIA Portsmouth—Continued								
U S Naval Hospital		Navy	2 4 5 6	1 325			20 Int 34 Res	Rotating Int Med OBG Ortho Surg Ped Surg
Richmond								
Crippled Children s Hospital 2924 Brook Rd 20	L 89	NPCorp		110			2 Res	Ortho Surg
Johnston-Willis Hospital 2908 Kensington Ave 21		Corp	6	235	45	7	12 Int 7 Res	Rotating Int Med OBG Path Surg
Medical College of Virginia—Hospital Division 1200 E Broad St 19	M 89X	State	4 5 6	1 184	57	8	60 Int 134 Res	Rotating St Med St Surg St Path Allergy Anes Derm Int Med Neuro Surg OBG Ophth Ortho Surg Otol, Path Ped Phys Med Psych Pul Dis Rad Surg Urol
Retreat for the Sick 2621 Grove Ave 20		NPCorp	6	89	33		3 Res	Gen Pract
Richwood Memorial Hospital 1300 Westwood Ave 27		NPCorp	6	376	41	4	18 Int 4 Res	Rotating Path Surg
St Elizabeth s Hospital 617 W Grace St 20		Corp	6	63	64	2	2 Res	Surg
State of Virginia Dept of Public Health Zone 19		State					1 Res	Public Health
Stuart Circle Hospital 415 Stuart Circle 20		Corp	6	150	38		8 Int	Rotating
Veterans Administration Hospital Broad Rock Rd and Belt Blvd 19	I 89	VA	6	1 046	71	1	80 Res	Anes Card Dis Gastro Int Med Neuro Surg Neur Ophth Ortho Surg Path Phys Med Psych Pul Dis Rad Surg Thor Surg Urol
Roanoke								
Gill Memorial Eye Ear and Throat Hospital 711 S Jefferson St		Indiv	1	25			2 Res	Ophth
Jefferson Hospital 1313 Franklin Rd S W 16		Corp	6	151	53	8	6 Int 5 Res	Mixed Int Med Surg
Lewis Gale Hospital 3rd and Luck Ave S W 11		Corp	6	180	40	6	6 Int 8 Res	Rotating Int Med Surg
Roanoke Memorial Hospital Belleview and Lake Aves 14		NPCorp	6	325	51		20 Int 10 Res	Rotating Int Med Path Surg
Suffolk								
Louise Obici Memorial Hospital Route 4		NPCorp		151	30		4 Res	Gen Pract
Williamsburg								
Eastern State Hospital		State		2,395	22	2	12 Res	Psych
Winchester								
Winchester Memorial Hospital S Stewart St		NPCorp	6	266	58	2	4 Int	Rotating
WASHINGTON								
Bremerton								
U S Naval Hospital Naval Base		Navy	2 6	240	93		6 Int	Rotating
Richland								
General Electric Company Hanford Atomic Products Operation		Corp					1 Res	Occup Med
Seattle								
Children s Orthopedic Hospital 4800 Sand Point Way 5	M 90	NPCorp	5	167	94	1	6 Int 10 Res	St Ped Anes Ortho Surg Path Ped Surg
Doctors Hospital 909 University St 1		NPCorp	6	187	48	4	8 Int 8 Res	Rotating Anes Int Med Path Surg
Firland Sanatorium 1704 E 150th St 55	M 90	County	6	600	64	2	3 Res	Pul Dis
King County Hospital Unit No 1 (Harborview) 325 Ninth Ave 4	M 90#	County	3 5 7	584	68	5	32 Int 163 Res	Rotating Anes Int Med Neuro Surg Neur OBG Ophth Ortho Surg Path Ped Phys Med Psych Rad Surg Urol
Providence Hospital 14th and E Jefferson St 22		Church	6	337	55	7	12 Int 18 Res	Rotating Gen Pract Int Med OBG Ortho Surg Path Rad Surg
St Frances Xavier Cabrini Hospital Terry Ave and Madison St 4		Church	6	228	70		6 Int	Rotating
Seattle General Hospital Fifth Ave and Marion St 4		NPCorp		125	28	4	1 Int	Rotating
State of Washington Dept of Health Smith Tower 4		State					8 Res	Public Health
Swedish Hospital 1212 Columbia St 4	I 90	NPCorp	6	361	55	5	16 Int 23 Res	Rotating Anes Int Med OBG Path Surg
U S Public Health Service Hospital 1131 14th Ave S 44		USPHS	4 5	324	79		12 Int 9 Res	Rotating Int Med Path Surg
University Hospital 1957 Pacific Ave 5	M 90X	State		107	86		24 Int 134 Res	Rotating Mixed Int Med Neuro Surg Neur OBG Phys Med Psych Rad Surg Urol
Veterans Administration Hospital 4435 Beacon Ave 99	M 90#	VA	4 6	320	92		44 Res	Anes Int Med Neuro Surg Neur Ortho Surg Path Psych Rad Surg Urol
Virginia Mason Hospital 1111 Terry Ave	L 90	NPCorp	6	210	94	2	10 Int 32 Res	Rotating Anes Int Med Ob Path Rad Surg
Sedro Woolley								
Northern State Hospital Box 309	L 90	State	6	1 863	66		9 Res	Psych
Spokane								
Deaconess Hospital 733 W Fourth Ave 4		Church	6	252	50		12 Int 3 Res	Rotating Int Med Path
Sacred Heart Hospital 101 Eighth Ave W 4		Church		534	40	9	15 Int 14 Res	Rotating Gen Pract OBG Path Rad Surg Thor Surg
St Luke s Hospital 830 N Summit Blvd 11		NPCorp	6	240	35	5	6 Int 2 Res	Rotating Gen Pract OBG
Shriners Hospitals for Crippled Children 820 N Summit Blvd 11		NPCorp	3	40	100		2 Res	Ortho Surg
Tacoma								
Madigan General Hospital Fort Lewis	L 90	Army	4 6	500	90		24 Int 26 Res	Rotating Int Med OBG Path Ped Surg

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
WASHINGTON, Tacoma—Continued								
Mountain View General Hospital 3582 Pacific Ave, 8		County	4-6	205	40	5	10 Int	Rotating
St Joseph Hospital 1812 S Lye St, 1		Church		219	35	6	6 Int 4 Res	Rotating Path
Tacoma General Hospital 315 South K St 5		NPCorp		222	51	8	10 Int 12 Res	Rotating Anes Path
WEST VIRGINIA								
Beckley								
Beckley Hospital 1007 S Oakwood Ave		Corp	1	155	51	4	4 Res	Surg
Beckley Memorial Hospital P O Box 128		NPCorp	6	193	63		24 Res	Int Med, Path, Ped, Surg
Bluefield								
Bluefield Sanitarium 307 Ramsey St		Corp	1	211	28	4	4 Res	Gen Pract
Charleston								
Charleston General Hospital Brooks St and Elmwood Ave, 25		NPCorp	6	220	42	16	16 Int 18 Res	Rotating, Gen Pract Int Med Path, Surg
Kanawha Valley Memorial Hospital 1014 Virginia St, E, 1		Corp	6	151	27	9	6 Int 3 Res	Rotating Surg
Memorial Hospital 3200 Noyes Ave, S E, 4		NPCorp		289	68	6	11 Int 16 Res	Rotating, Int Med, OBG, Path, Ped, Surg
Clarksburg								
St Mary's Hospital 464 68 Washington Ave		Church	3 6	215	26	1	2 Res	Path
Huntington								
Cabell Huntington Hospital 1340 16th St, 1		NPCorp	1 4-5-6	234	52	9	8 Int 16 Res	Rotating Gen Pract Int Med, Path, Surg
Chesapeake and Ohio Hospital 1801 Sixth Ave, 3		NPCorp	3-6	165	47	7	8 Res	Int Med, Surg
St Mary's Hospital 2900 First Ave, 2		Church	6	275	42	18	14 Int 5 Res	Rotating, Path, Surg
Martinsburg								
Veterans Administration Center	L 20	VA	2	840	60		7 Res	Path Surg
Montgomery								
Laird Memorial Hospital		NPCorp	6	127	22		2 Res	Surg
Parkersburg								
Camden Clark Memorial Hospital 717 Ann St		City	6	194	29	6	6 Int	Rotating
St Joseph's Hospital 1801 Market St		Church	6	195	25		6 Int 1 Res	Rotating Gen Pract
Philippi								
Broaddus Hospital College Hill		NPCorp		102	60	5	3 Res	Surg
Weirton								
Weirton General Hospital		NPCorp	1	175	31	6	6 Int	Rotating
Wheeling								
Ohio Valley General Hospital 2000 Eoff St		NPCorp	5 6	426	47	20	15 Int 27 Res	Rotating Anes, Gen Pract Int Med, Path, Surg
Wheeling Hospital 109 Main St		Church	5-6	226	33	7	10 Int	Rotating
Williamson								
Memorial Medical Center P O Box 1410		Part	6	133	42		9 Res	Int Med
WISCONSIN								
Beloit								
Beloit Hospital 431 Olympian Blvd		City	2 3	190	34		1 Res	Path
Eau Claire								
Luther Hospital 310 Chestnut St		NPCorp		250	55	5	6 Int	Rotating
Fond Du Lac								
St Agnes Hospital 430 E Division St		Church		350	35	1	4 Res	Path
Janesville								
Mercy Hospital 566 N Washington St		Church		236	33	7	5 Int 1 Res	Rotating Surg
La Crosse								
La Crosse Lutheran Hospital 1910 South Ave		Church		250	35	9	6 Int 4 Res	Rotating Int Med Surg
St Francis Hospital 709 S 10th St		Church	1	250	37	6	8 Int 2 Res	Rotating Gen Pract
Madison								
Madison General Hospital 625 Mound St, 5	L 91	NPCorp	6	346	46	6	14 Int 15 Res	Rotating, Int Med, Path Surg, Urol
Mendota State Hospital 301 Troy Dr, 4	L 91	State	6	985	19		5 Res	Psych
Methodist Hospital 309 W Washington Ave, 3	L 91	Church		145	57	4	5 Int 2 Res	Rotating, Gen Pract, Surg
St Mary's Hospital 720 S Brooks St, 5	L 91	Church	6	272	57	7	10 Int 6 Res	Rotating, Gen Pract Int Med, OBG
University Hospitals 1300 University Ave, 6	M 91X	State	6	704	81	19	22 Int 184 Res	Mixed, St Ped, Allergy, Anes, Card Dis Derm, Int Med Neuro Surg Neur, OBG Ophth, Ortho Surg, Otol Path, Ped Allergy, Ped, Plas Surg, Psych, Rad, Surg, Urol
Veterans Administration Hospital 2500 Overlook Terrace, 5	L 91	VA	2	475	89		7 Res	Int Med, Neur, Pul Dis
Marshfield								
St Joseph's Hospital 611 St Joseph's Ave		Church	6	270	56		7 Int 5 Res	Rotating, Path, Surg
Milwaukee								
Columbia Hospital 3321 N Maryland Ave, 11		NPCorp	6	263	73	13	23 Res	Int Med, Neuro Surg, Ortho Surg, Path, Rad Surg
Evangelical Deaconess Hospital 620 N 19th St, 3		Church		268	42	23	12 Int 19 Res	Rotating, Gen Pract, Path, Rad, Surg
Milwaukee Children's Hospital 1700 W Wisconsin Ave 3	M 92	NPCorp	5	160	93	1	2 Int 11 Res	St Ped, Ortho Surg, Ped

Name and Location	Medical School Affiliations	Control	Footnotes	Number of Beds	Autopsy Percentage	Foreign House Staff	Positions Offered	Approved Programs
WISCONSIN Milwaukee—Continued								
Milwaukee County Hospital	M 92	*County*	4 6	661	51	13	*26 Int*	*Rotating*
8700 W Wisconsin Ave 13							105 Res	Anes Gen Pract Int Med OBG Ophth Ortho Surg, Path Ped Proct Rad Surg Urol
Milwaukee County Hospital for Mental Diseases	I 92	County	6	1 125	42		9 Res	Psych
8844 Watertown Plank Rd 13								
Milwaukee Hospital	I 92	Church	6	347	57	5	12 Int	Rotating
2300 W Kilbourn Ave 3							13 Res	Gen Pract Int Med OBG Path Rad Surg
Milwaukee Sanitarium	I 92	NPCorp		152	85	3	9 Res	Psych
1220 Dewey Ave 13								
Mt Sacordia Hospital		*Church*	6	177	49	1	*6 Int*	*Rotating*
1225 N 22nd St 3								
Mount Sinai Hospital		NPCorp	6	293	40	16	14 Int	Rotating
948 N 12th St 3							24 Res	Int Med OBG Path Rad Surg
Muirdale Sanatorium		County	2 6	507	32		2 Res	Pul Dis
10437 Watertown Plank Rd 13								
St Francis Hospital		Church	6	265	33		12 Int	Rotating
3237 S 16th St 15								
St Joseph's Hospital	I 92	Church	6	354	50		12 Int	Rotating
900 W Chambers St 10							21 Res	Int Med OBG Path Rad Surg
St Luke's Hospital		NPCorp		263	45	21	12 Int	Rotating
2000 W Oklahoma Ave 15							17 Res	Gen Pract Int Med OBG Path Rad Surg
St Mary's Hospital		Church		244	64		10 Int	Rotating
2220 N Lake Dr 11							7 Res	Int Med OBG Path
St Michael Hospital		Church	1 6	260	40	14	10 Int	Rotating
2400 W Villard Ave 9							8 Res	Gen Pract
Veterans Administration Hospital	M 92#	VA	2 4 6	1 233	77	1	65 Res	Anes Derm Gastro Int Med Ophth Ortho Surg Otol Path Phys Med Psych Pul Dis Rad Surg Thor Surg Urol
S 84th and National Ave 14 (Wood)								
Wausau								
St Mary's Hospital		*Church*		220	38	2	4 Int	Rotating
Maple Hill								
West Allis								
Allis Chalmers Mfg Co		Corp					1 Res	Occup Med

ABBREVIATIONS AND NOTES

1 Appointments restricted to men only
2 U S citizenship required for appointment
3 Foreign medical graduates not eligible for appointment
4 Dental internships available
5 Dental residencies available
6 Hospital offers employment to medical students for non curricular services
7 Two year family practice program
8 Hospital operated by the New York City Department of Hospital
X Hospital owned by medical school

Medical school has exclusive right to appoint or nominate all members of the hospital staff assigned to service used by the school for teaching

C&Co City and County
Corp Corporation unrestricted as to profit
Dist Hospital District
NPCorp Nonprofit corporation
Part Partnership
St Straight (internship)

Medical School Affiliations

Footnotes 10 to 92 refer to medical schools affiliated with hospitals for undergraduate clinical clerkships
Hospitals have been identified with the symbol M when a medical school has indicated that the hospital is a major unit in the school's teaching program Hospitals have been identified with the symbol L when a medical school has indicated that the hospital is used to a limited extent in the school's teaching program

10 Medical College of Alabama Birmingham Ala
11 University of Arkansas School of Medicine Little Rock Ark
12 College of Medical Evangelists Loma Linda Los Angeles
13 *University of California School of Medicine Los Angeles*
14 University of Southern California School of Medicine Los Angeles
15 Stanford University School of Medicine Palo Alto Calif
16 University of California School of Medicine San Francisco
17 University of Colorado School of Medicine Denver
18 Yale University School of Medicine New Haven
19 *Georgetown University School of Medicine Washington D C*
20 George Washington University School of Medicine Washington D C
21 Howard University College of Medicine Washington D C
22 *University of Florida College of Medicine Gainesville Fla*
23 University of Miami School of Medicine Coral Gables Fla
24 Medical College of Georgia Augusta Georgia
25 Emory University School of Medicine Emory University Georgia
26 Chicago Medical School Chicago
27 Northwestern University Medical School Chicago
28 *Stritch School of Medicine of Loyola University Chicago*
29 University of Chicago School of Medicine Chicago
30 University of Illinois College of Medicine Chicago
31 Indiana University School of Medicine Indianapolis
32 *State University of Iowa College of Medicine Iowa City*
33 University of Kansas School of Medicine Kansas City
34 University of Louisville School of Medicine Louisville
35 Louisiana State University School of Medicine New Orleans
36 Tulane University School of Medicine New Orleans
37 Johns Hopkins University School of Medicine Baltimore
38 *University of Maryland School of Medicine and College of Physicians and Surgeons Baltimore*
39 Boston University School of Medicine Boston
40 Harvard Medical School Boston
41 Tufts University School of Medicine Boston
42 University of Michigan Medical School Ann Arbor Mich
43 Wayne State University College of Medicine Detroit
44 *University of Minnesota School of Medicine Minneapolis*
45 University of Mississippi School of Medicine Jackson Miss
46 University of Missouri School of Medicine Columbia Mo
47 St Louis University *School of Medicine* St Louis Mo
48 Washington University School of Medicine St Louis Mo
49 Creighton University School of Medicine Omaha Neb
50 University of Nebraska College of Medicine Omaha Neb
51 Dartmouth Medical School Hanover N H
52 Seton Hall College of Medicine and Dentistry Jersey City
53 Albany Medical College of Union University Albany N Y
54 University of Buffalo School of Medicine Buffalo N Y
55 Albert Einstein College of Medicine of Yeshiva University New York City
56 *Columbia University College of Physicians and Surgeons New York City*
57 Cornell University Medical College New York City
58 New York Medical College Flower and Fifth Avenue Hospital New York City
59 New York University College of Medicine New York City
60 State University of New York College of Medicine New York City
61 State University of New York Upstate Medical Center Syracuse N Y
62 *University of Rochester School of Medicine Rochester N Y*
63 *University of North Carolina School of Medicine Chapel Hill*
64 Duke University School of Medicine Durham N C
65 Bowman Gray School of *Medicine of Wake Forest College* Winston Salem N C
66 University of Cincinnati College of Medicine Cincinnati
67 Western Reserve University School of Medicine *Cleveland Ohio*
68 Ohio State University College of Medicine Columbus
69 University of Oklahoma School of Medicine Oklahoma City
70 University of Oregon Medical School Portland
71 *Hahnemann Medical College and Hospital of Philadelphia*
72 *Jefferson Medical College of Philadelphia*
73 Temple University School of Medicine Philadelphia
74 *University of Pennsylvania School of Medicine Philadelphia*
75 Woman's Medical College of Pennsylvania Philadelphia
76 University of Pittsburgh School of Medicine Pittsburgh
77 University of Puerto Rico School of *Medicine San Juan*
78 Medical College of South Carolina Charleston
79 University of South Dakota School of Medical Science Vermillion S D
80 *University of Tennessee College of Medicine Memphis*
81 Meharry Medical College Nashville Tenn
82 Vanderbilt University School of Medicine Nashville Tenn
83 *University of Texas Southwestern Medical School Dallas*
84 University of Texas Medical Branch Galveston Texas
85 Baylor University College of Medicine Houston
86 University of Utah School of Medicine Salt Lake City
87 University of Vermont College of Medicine Burlington Vt
88 University of Virginia School of Medicine Charlottesville
89 *Medical College of Virginia Richmond*
90 University of Washington *School of Medicine Seattle*
91 University of Wisconsin Medical School Madison
92 Marquette University School of Medicine Milwaukee

The National Intern Matching Program

The Directory of Approved Internships lists all of the hospitals approved by the Council on Medical Education and Hospitals of the AMA for the conduct of intern-training programs Over 98% of these hospitals participate in the matching program for internship appointment The matching program is limited to those hospitals which have signed an agreement to participate in the matching program for the coming year and to abide by the rules and regulations The NIMP does not approve hospitals for internship training nor does it limit the number of interns a hospital may seek through the program except that the number sought may not exceed the number authorized by the AMA A hospital may wish to secure only a portion of its intern complement through the NIMP, and accordingly the directory contains one column showing the authorized complement of interns and another column indicating the number sought through the matching program Those hospitals not participating in the matching program will be identified by footnote reference and also by the fact that they have no assigned NIMP code number

In this directory the federal services, except for the Veterans Administration, are listed first Please note that in applying for internship training in the Air Force, the Army, the Navy, or the Public Health Service, the student applies, insofar as the matching is concerned, directly to the service involved and not to a specific hospital The student, however, may be requested by the government service involved to designate several service hospitals in order of choice If matched, the service will attempt to meet the student's first choice In cases in which this is not possible, the student may be assigned another of his choices within that service Each service is completely separate, and this assignment to a particular hospital is performed entirely by the service involved In the matching program, the student is matched only to the service itself, and not to a particular hospital within it The government services do not issue internship contracts Following the listing of the federal services all participating hospitals are listed alphabetically by state, within each state by city, and within the city by the name of the hospital In writing to a hospital the student should address the Chairman of the Intern Committee except where otherwise noted

The Directory of Approved Internships includes additional information not published previously and also lists the name of the program director in most instances Note that the address of the hospital is not included in this list but will be found along with certain other basic data in the consolidated list of hospitals with approved graduate training programs preceding this portion of THE JOURNAL

The code number designates one specific type of internship at one particular hospital It is to be used by the student on the confidential preference blank he fills out to indicate his choice among the internships for which he has applied The code is a device to increase the accuracy of identification

If a student is applying to a hospital which offers several different types of internships, he must indicate on his confidential preference blank his preference for the specific type of internship in that hospital for which he has applied For example, if a student applies for an internship in straight surgery and also a general rotating internship at the same hospital, he must rank these just as if they were separate hospitals

In a few of the larger hospitals the situation is complex At Boston City Hospital, for example, there are several different services offering internships in straight surgery The student must be sure to indicate in his order of choice the service or services for which he has applied

Because of the intense desire of some hospitals to secure interns and because of an equally strong desire of some students to intern at a particular hospital, pressure may be brought by either party on the other to force an early commitment Such demands are contrary to the regulations agreed to by both student and hospital Moreover, in the matching plan only the confidential rating blanks of hospital and of the student are official and what is given there and confirmed is final

The matching plan does not penalize either group from taking "flyers" Should a student apply to a hospital in which he thinks his chances of acceptance are poor, his chances at his second choice hospital are just as good as if he had rated it first Similarly, if a hospital rates as its first choice a man it believes it has little chance of securing, and does not secure him, this hospital will have just as good a chance to get its second-choice man as if it had rated him first

WHAT THE PARTICIPATING STUDENT DOES

The student participating in the matching program for internship appointment this year should complete in turn each of the following steps

1 He registers with the plan by signing an agreement to abide by the regulations and paying a fee of $2 00 The dean of each medical school has full information and the agreement forms The student retains a copy of the agreement on the reverse side of which is a schedule of dates

2 He corresponds with, visits, and learns about the hospitals in which he is interested Students participating in the matching program may apply to any NIMP member hospital listed in this directory The hospitals listed here have agreed not to offer internship appointments to anyone not in the plan until March 13, 1961

3 He applies for internship to any hospital listed in this directory by filing an application, taking tests, being interviewed, etc , according to the requirements of the hospital

In his relations with the hospital the participating student has agreed that he will not request or demand that the hospital state how it will rank him, and he has indicated that he understands that both he and the hospital have the right to change their minds at any time prior to the submission of the official confidential rating blank

4 He requests his dean to supply credentials and letters of recommendation to the hospital where he has applied This material will be sent by the dean between Oct 1 and Dec 10, 1960

5 The student submits, on a form sent to him, the confidential rank order list of his preference among the internships for which he has applied This list is to be mailed so as to arrive at the NIMP office in Evanston on or before Jan 30, 1961 The confidential lists should be submitted as early as the senior has definitely decided about the rank order of his hospitals

6 The student will receive before Feb 13, 1961, a confirmation of his rank order list Any errors in this list should be reported immediately to the NIMP Corrections cannot be made after Feb 18, 1961, when the matching process takes place

7 The student will receive on Mar 13 the name of the hospital with which he has been matched This information will be given to the student by his dean

8 The student will receive from the hospital confirmation of the fact that he is to intern there and will complete arrangements with the hospital

Fundamental to the plan is the freedom of both the student and the hospital to establish contact with each other and independently to arrive at a judgment of relative merit Neither student nor hospital is handicapped by listing as first choice an individual or a hospital which does not reciprocate that feeling The program matches the student with his highest choice hospital which is available to him and gives the hospital the students it wants most who wish to go there in preference to other hospitals available to them

The NIMP is a central clearing agency

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THE STUDENT AND THE MECHANICS OF MATCHING

(This section was prepared by N C Webb, Jr, in 1953 when a student member of the Board of NIMP)

This is an explanation of how the National Internship Matching Program acts as your agent in trying to get you the internship you want most

First you consider the possibilities You probably know now in a general way which hospitals interest you Your dean and faculty members probably know about others, as do your friends By writing to the hospitals directly you get their application forms, etc You may want to visit various hospitals, talk with the interns there, and confer with their staff After you have gathered all the information you need, you make up your mind how you rank the various hospitals you have applied to The hospitals do the same with their applicants Your rank must be sent to Chicago to arrive by February 1

Your confidential ranking list tells the central clearinghouse how to act on the offers made to you by the hospitals you have applied to The list made out by the hospital tells the same clearinghouse its preference among its applicants If you are offered your first choice hospital at any time, it is immediately accepted, and all your other applications are withdrawn If the first internship you are offered is not your first choice, it is accepted tentatively, pending further offers Applications to hospitals you ranked lower on your list are then withdrawn (to give other students a chance at these hospitals) If several hospitals offer you jobs, the one you ranked highest is held for you, and your applications to the others are withdrawn The clearing house holds this tentative internship for you until you get a new offer A new offer must be from a hospital you rate higher and therefore it will be held for you It must be higher than the one you have held because all your applications to the hospitals which you ranked lower have been withdrawn

Following the instructions sent in by the hospital the clearinghouse re offers an internship previously held for you whenever the clearinghouse finds that you are offered another internship The internship you no longer want is offered to the next applicant on the hospital's list Thus the hospitals use the National Internship Matching Program as their agent in offering internships in the same way you do in accepting them That is, they state the order in which they prefer students, and the office works down the list made by the hospital until either the hospital runs out of applicants it will accept or gets all the interns it it needs

If you have not been matched by the steps described so far, your first choice hospital ranked you below the men it wanted most But if enough of the men above you on the hospital's list get jobs they prefer at other hospitals, the internship you want most will eventually be offered to you The same applies to your second choice and to all the other hospitals which you ranked above the job that is being held for you tentatively

What may stop you from moving up step by step until you get to your first choice is this A hospital may fill its jobs with men who want to go to that hospital and who were higher in the hospital's rank list than you were If this happens to your first choice hospital and you are holding a tentative acceptance from your second choice hospital, this is as high as you can go, and you are permanently matched with your second choice hospital It may be that you applied to twelve hospitals which have many other applicants, and all twelve filled before getting down to your application If the thirteenth hospital on your list wanted you, you would be matched there because it was the highest you could get You cannot lose the place offered you by the thirteenth hospital while your application waits for what you think is a better hospital In short, whenever the clearinghouse is faced with a choice between two hospitals, it gives the student the one highest on his rank list

Defined simply, the principles of matching from your standpoint are these

1 **You get the highest internship on your list that has an opening for you**

2 **Whether or not an internship is "open to you" is determined by whether or not the internship can be filled with men the hospital ranked higher than it ranked you If it cannot, and they will accept you, you are "in"**

Thus, there are only two possible reasons for your not receiving your first choice internship They are that the internship is filled by men preferable to the hospital, or that the hospital marked you X (meaning it did not want you in any case) The only way a hospital can be matched to any given man on its list is that the man rates it his first choice or he is unable to receive any other internship he prefers

The principle process of the matching can perhaps best be explained by a pictorial ladder or set of steps

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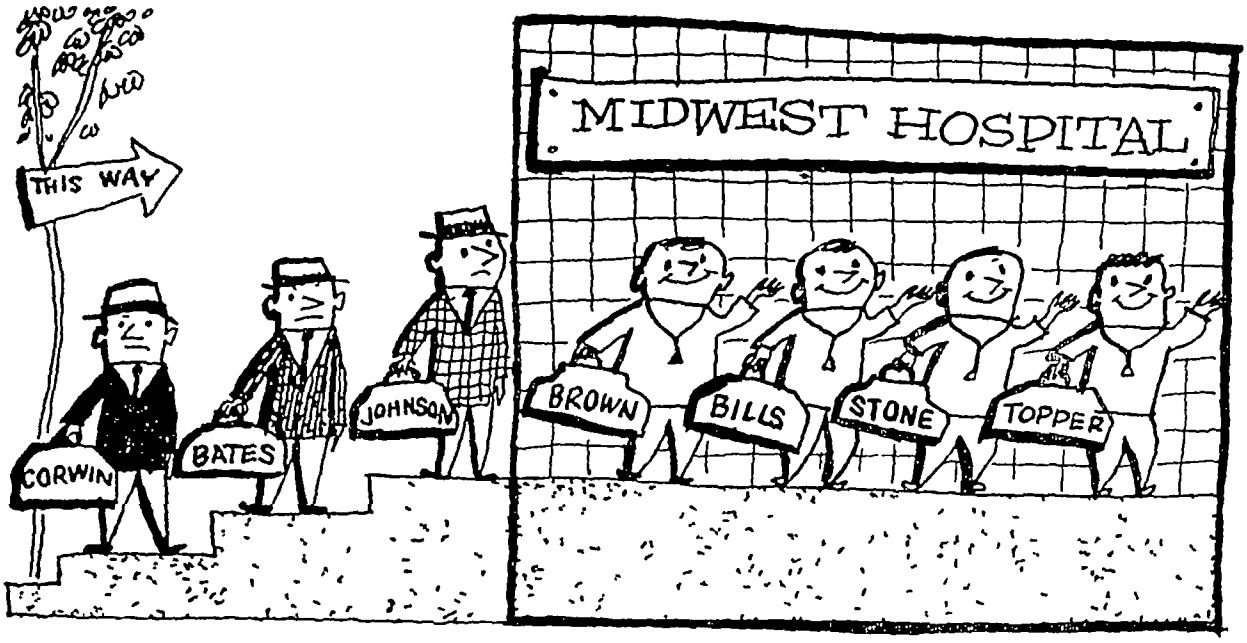

Here Midwest Hospital has ranked its 7 applicants in the order in which they are shown on the ladder They offer four internships Topper, Stone, Bills and Brown are ranked highest by the hospital If all of these four men have ranked Midwest their first choice, they are immediately "matched" to Midwest, and Midwest is filled Johnson, Bates and Corwin must seek elsewhere since the hospital was filled with men it preferred

Suppose, however, that Stone has ranked Midwest "second" Stone cannot be by-passed on the ladder, but if he can get his first choice hospital which is on another "ladder," he is removed from this ladder If Stone is within, or *moves* within the quota in his first choice hospital, he jumps off the Midwest ladder, since he can definitely get into a hospital he prefers to Midwest Bills and Brown move up a notch and make room for another man (Johnson) in the quota part of this ladder

This type of movement is occurring on some 1,000 different internship ladders in the matching program As soon as a man gets within a quota at a hospital of his choice, his lower choices are removed from the ladders on which they are holding rungs, permitting movement upward of lower men on those ladders No choice is removed unless the man is definitely "in quota" at a choice he prefers, or unless the hospital is filled by men it prefers

Consider an example showing the full matching of three hospitals and three students

Example

Student Confidential Preference Lists

Green
1 Mt Sinai
2 Internia

Smith
1 Mt Sinai
2 Internia

Jones
1 Internia
2 St Joseph
3 Mt Sinai

Hospital Preference Lists

Mt Sinai (2)
1 Jones
2 Smith
3 Green

Internia (1)
1 Smith
2 Jones
3 Green

St Joseph (1)
1 Jones

The number in parentheses shows the number of interns being sought by each hospital

Consider Green, whose first choice is Mt Sinai, which offers two internships, and which has ranked him third Unless either Jones or Smith get matched elsewhere, he cannot get in He is also waiting at Internia, since it, offering but one internship, has shown preference for Smith and Jones, and, unless both Smith and Jones get matched elsewhere, Green is not in here yet either

Consider Smith He ranked Mt Sinai first, and it ranked him second Since Mt Sinai offers two internships, Smith can be permanently matched Since Smith is now matched at his first choice hospital, his name is removed from Internia, his second choice, and Jones and Green slide up

Now the situation looks like this (°indicates a permanent match)

Student Lists

Green	*Smith*	*Jones*
1 Mt Sinai	°1 Mt Sinai	1 Internia
2 Internia	2 *Internia (Not chosen)*	2 St Joseph
		3 Mt Sinai

Hospital Lists

Mt Sinai (2)	*Internia (1)*	*St Joseph (1)*
1 Jones	1 *Smith (Not chosen)*	1 Jones
°2 Smith	2 Jones	
3 Green	3 Green	

Consider Jones Since the removal of Smith from Internia's list, Jones has moved up to top position This is a permanent match, since it is Jones first choice Jones name is removed from the Mt Sinai list and from the St Joseph list, since he is matched at a hospital he prefers to either of these

Now the situation looks like this (°°denotes filled hospital)

Student Lists

Green	*Smith*	*Jones*
1 Mt Sinai	°1 Mt Sinai	°1 Internia
2 Internia	2 *Internia (Not chosen)*	2 *St Joseph (Not chosen)*
		3 *Mt Sinai (Not chosen)*

Hospital Lists

Mt Sinai (2)	°°*Internia (1)*	*St Joseph (1)*
1 *Jones (Not chosen)*	1 *Smith (Not chosen)*	1 *Jones (Not chosen)*
°2 Smith	°2 Jones	
3 Green	3 Green	

The removal of Jones name from Mt Sinai allows Green to slide up into second place Since two internships are offered at Mt Sinai, Green is a permanent match Final results

Mt Sinai — Smith and Green
Internia — Jones
St Joseph — None

The three students all were matched with their first choice hospital In this example, we have seen how men "slide up" on hospital lists, as men above them are matched to hospitals more desired by those men You will note that each man holds his positions on the lists of the various hospitals until he becomes a permanent match No one can 'by-pass a student on a hospital list A student is removed from a hospital list only when he is matched with a hospital he prefers more St Joseph got no intern because its one applicant preferred Internia and was matched there

SOME OF THE RESULTS OF USING THIS MATCHING PROGRAM

Some conclusions can be drawn about how you get an internship by using the Matching Program as your agent

1 Which internship you finally get is determined by the decisions you, the other students, and the hospitals will make in January when you make up your rank lists The Evanston office is a clearing house which does nothing but follow the instructions you have sent it in the form of a rank list

2 You can (and do) hold on to any offer from the hospitals to which you applied until you get a better one Before the Matching Program was set up, hospitals found out whether you would take their offers by telegraphing you on a certain day You were obliged to give them an answer within hours so they could offer the job to someone else if you did not want it So in many cases you had to try to guess whether you were going to get a better offer later on If you guessed that you would, and were wrong, you ran the chance that the hospital that *had* offered you a job, was now filled with other students If you guessed that you would *not* get an offer from a hospital you wanted more, but guessed wrong and *got one* after you had accepted the hospital that asked you first, you could not take the hospital you preferred On the contrary, by using the Matching Program you hold any offer until you get a better one

3 Therefore it is distinctly to your advantage to get your internship through the Matching Program if you are applying to either

a More than one hospital, or

b A hospital which is likely to fill its internships with applicants who are using the matching program

4 You can take as many "flyers" (i e ranking at the top of your list hospitals you think are very likely to fill up before they make an offer to you) as you wish without losing a single offer that you would have otherwise gotten However you should be realistic as well, and apply to hospitals which are likely to want you If you don't, you may end up unmatched (see #8 below)

5 There are many more internships offered than there are students to take them (12,000 vs 6,000) Therefore many internships are going to be left over after all of the students are placed Some of these hospitals, which might not fill all their jobs, may try to get you to agree to rate them higher than you want to, in return for their agreeing to "rate you high" You cannot gain anything by doing this, and you can *lose* a chance to get an internship at a hospital you prefer Where you rank a hospital has nothing to do with when the hospital offers you a job If they want you, you will be matched with that hospital even if you rank that hospital the last on your list, providing you cannot get into any of the hospitals you have ranked higher

6 Some hospitals have decided, for example, that they will only take men from certain schools or, again for example, only take men in the top 1/20th of their class Such hospitals tell the matching program to offer jobs only to the men whom the hospital has interviewed and has decided fill its requirements If these men are few, and if they want and get other internships, even a very good teaching hospital in a large university may not fill all its jobs through the matching program

Some hospitals would like to know who some of their interns are going to be before making up their mind about who else they want In ranking the applicants for the remaining places such hospitals would like to get people with different backgrounds and interests A very few of these hospitals may try to find out how you rate them so they can know whether they can be sure of getting you if they want you (i e whether you will put them at the top of your list)

This is obviously unfair, for example to the students who would rate such a hospital second and who are not sure of getting into their first choice hospital Therefore when this plan was set up the students required that it be made illegal for a hospital to demand to know where you rate them Hospital knowledge of a student ranking may imply a threat if you do not rate their hospital first, they will drop you down their list in favor of students whom the hospital can be sure to get (because they know the student rates the hospital his first choice)

There is absolutely no way for a hospital to find out how you rated it before the results of the matching are announced Even after the announcement the hospital can find out only if you end up matched to another hospital and they either did not fill or get a man who was lower on their list than you were Therefore the hospital that did not get you can reason that you ranked the hospital at which you are interning higher They cannot find out if you are unable to get your higher choices They cannot find out how many other hospitals, if any, you ranked higher The hospital is never told how its applicants ranked it The clearing house holds your list of instructions in the strictest confidence

7 There is absolutely no reason for a student to want to change his instructions about which hospitals he prefers because of the way a hospital ranked him Therefore it is all right if a hospital wishes to tell you how it may plan to rate you However, the hospital does not have to do so and you have no right to demand such information from them In many cases the hospital will not know, or may make only a general statement because it has not yet looked over all its applicants, or it may not want to tell you at all

8 If it is impossible to match you with any of the hospitals to which you have applied obviously you will not be matched by the program There are only three things that can prevent you from being matched with any hospital to which you apply

You can of course, tell the office that rather than being matched with a particular hospital you applied to, you would prefer to be left unmatched and take your pick of the 5,000 internships left over after almost everyone else has been matched This is called X-ing a hospital It must be done before February 1 The Chicago office simply withdraws its record of your application to that hospital The hospitals can do the same for any student they absolutely will not take under any circumstances

Thus you will not be matched if one of the following happens for each of the hospitals to which you applied

a You X the hospital

b The hospital Xs you or

c The hospital fills with applicants it prefers and who want to intern more than at other hospitals which want the a

Last year this happened to less than 5% (289) of the students in the program They were very quickly taken by the 696 (out of 808) hospital units which sought, but failed to get, 5,237 interns through the Matching Program *

There were some very desirable internships indeed among these unfilled places—which has led some people to the illogical conclusion that you can do better if you are unmatched than you could by getting an internship through the Matching Program Of course this is true if you only apply to hospitals you do not like very well But it is certainly not true if you are wise in choosing the hospitals you apply to You can be *sure* of getting any internship through the program which you *might* get by being unmatched Furthermore if you are in the program you can apply to, and have a chance of getting into, hospitals that will fill up with applicants from the program Last year over a third of the applicants matched got internships in hospitals which filled up These hospitals were closed to the students who ended up unmatched

9 Once the students and the hospitals have made up their minds, the process of working out which internship you will get proceeds according to the rules set out above No other decisions are made by anyone Therefore it becomes a mechanical problem The National Internship Matching Program, Inc, has worked out with the International Business Machines (IBM) ways of doing most of the work by machine Before the results are sent out the people in the Matching Program office go through and check by hand to make sure there is no slip up by looking to see that

a No student is matched with a hospital unless all the hospitals he would have preferred to go to either were filled with applicants they preferred or the hospitals asked not to be matched with the applicant (ranked him X)

b No hospital is matched with a student unless all the students who were more desirable to the hospital got offers from other hospitals they preferred, or the higher students had marked that hospital X

No mechanical mistakes have ever been found in the operation of the program

10 Because the plan does away with all the telegrams that hospitals used to have to send to get their interns, the hospitals pay a fee for each man who is matched to them Because of the advantages this program offers you over the old system (see #2, above) you have been asked to pay $2 00 toward the cost of operating the Chicago office of the National Internship Matching Program, Inc, (which is a non-profit corporation) Two students sit on the Board of Directors of the corporation—one representing the Student AMA and the others—students-at-large Also represented are the hospital associations, the Association of American Medical Colleges and the Council on Medical Education and Hospitals of the American Medical Association

*Figures apply to the 2nd matching program in 1953

NATIONAL INTERN MATCHING PROGRAM

2530 North Ridge Avenue, Evanston, Illinois

STUDENT AGREEMENT

Please return with fee to your Dean or N I M P Office by June 10, 1960

Be sure that you use this same order of names and initials upon all hospital applications and correspondence that concern the matching program

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I _____ (Last Name (Please Print)) _____ (First Name) _____ (Middle Name), a student at _____ Medical School, plan to apply for an internship to start between Apr 1 and Dec 31, 1961, I agree to participate in and abide by the results of the matching plan for internship appointment In particular, I understand that I am agreeing

1 To apply for internship appointment only to hospitals and the federal services registered in the matching plan until after the matching plan results are announced I understand that an official directory listing the cooperating hospitals and federal services will be available in October 1960

2 To accept appointment to the hospital or federal service with which I am officially matched, that hospital being the highest one on my preference list having a place available for me I understand that I cannot avoid accepting an internship to which I have been matched without a written release from the hospital concerned—also that another hospital that is a member of N I M P cannot accept me as an intern unless I have this release

3 To abide by the official schedule including ranking the internships for which I have applied and returning my confidential ranking form before Feb 1, 1961

4 To send herewith a non-refundable fee of $2 00 to help cover the costs of participation in the matching plan

It is my understanding that I am free, under the matching plan, to make personal contacts with any participating hospital in which I am interested and to apply to as many of these hospitals as I wish and to rank them according to my judgment

I understand further that although I may freely discuss any matter I choose with the hospital, no participating hospital has the right, under the matching plan to demand or to require that I state how I shall rank that hospital on my confidential rating blank I understand also that I have no right to request or to demand that that hospital inform me how it plans to rate me

Furthermore, any statement or other expression concerning how I intend to rank a hospital or how that hospital intends to rank me, which may be made during the free discussion between the hospital and myself, is subject to change based on further considerations I understand that both the hospital and I have the right to change our minds at any time prior to the submission of the official confidential rating blanks

My confirmed confidential rating blank, giving my order of preference, is to be the sole determinant of the order of my preference among the internships for which I have applied

I understand that resignation from the Matching Program can be made only with the approval of my dean, and that no resignations can be accepted after November 14, 1960

I agree to conduct myself in conformity with the high ethical standards expected of members of the medical profession

Date _____ Signature _____

The Matching Program is the official cooperative plan for Internship Appointment of the American Hospital Association, the American Protestant Hospital Association, the Association of American Medical Colleges, the Catholic Hospital Association, the Council on Medical Education and Hospitals of the American Medical Association, the Student American Medical Association, and the medical services of the federal agencies offering internships

Please return this Student Agreement and fee to your Dean or the N I M P Office by June 10, 1960

NATIONAL INTERN MATCHING PROGRAM, INC

2530 Ridge Ave , Evanston, Illinois

Special Arrangement for Married or Engaged Couples Wishing to Intern Together

It is the aim of the Matching Program to match all students according to their expressed preferences insofar as these preferences are available to them Matching of couples who wish to intern together entails special handling, therefore, we ask you to check the situation which applies in your case

_____ 1 We wish to be matched to the same internship at the same hospital (e g straight medicine at the same hospital)

_____ 2 We wish to be matched to the same hospital but not necessarily to the same internship (e g one might wish rotating and the other, straight medicine at the same hospital)

_____ 3 We wish to be matched to hospitals in the same city, even if we both cannot get the same hospital

_____ 4 Although married we wish to be matched completely independently

_____ (Medical School)

_____ (Signature of one)

_____ (Date)

_____ (Signature of other)

If alternative 1 is selected, both husband and wife should rank the internships in exactly the same order and should inform the hospitals that they wish to intern together and would appreciate having the hospital rank them at approximately the same level If alternative 2 is selected both should rank the hospitals in the same order and again, the hospital should be informed of the desire of the partners to intern together It should be understood that if the hospitals are ranked in the order A, B, and C, and only one partner is matched with hospital A, then that matching will be cancelled and both partners matched with hospital B providing hospital B has a place for both of them

NATIONAL INTERN MATCHING PROGRAM, INCORPORATED
2530 N Ridge Avenue, Evanston, Illinois

HOSPITAL AGREEMENT

FOR FIRST-YEAR INTERNSHIPS FOR THE YEAR 1961-62
(Starting between April 1, and December 31, 1961)

Name of Hospital _____

Location of Hospital _____
Street

_____
City Zone State

On behalf of the hospital named above, I agree to abide by the regulations of the National Intern Matching Program for appointment of interns for first year Internship for 1961-1962 (starting service from Apr 1 through Dec 31, 1961)

In particular it is understood that this hospital is agreeing to

1 Offer internship appointment to all applicants matched with this hospital by the matching program, the matched students being the highest ranked students on this hospital's confidential ranking form who wish to intern here more than at any other hospital available to them

2 Restrict internship appointment for United States and Canadian applicants to participants designated for this hospital through the matching program until after notification of the selections made through the matching program

3 Make or require no commitments or contracts with United States or Canadian applicants prior to the notification of the selections made through the matching program

4 Abide by the official schedule including accepting no applications from participants in the matching plan after Jan 25, 1961, rating applicants and returning rating form by Jan 30, 1961, offering formal appointment promptly to individuals matched by the plan with this hospital, and no later than Mar 31, 1961

5 Not accept an intern who was matched elsewhere and subsequently not released

6 Pay a service fee of $4 00 for each intern matched through the plan

We understand further that although we may freely discuss any matter we choose with the student, no participating hospital has the right, under the plan, to demand or to require that the student state how he will rank this hospital on his confidential rating blank We also understand that the student has no right to request or to demand that this hospital inform him how it plans to rate him

Furthermore, any statement or other expression concerning how this hospital intends to rank an applicant or how that applicant intends to rank this hospital, which may be made during the free discussion between the hospital and the student, is subject to change based on further considerations We understand that we, as well as the student, have the right to change our minds at any time prior to the submission of the official confidential rating blanks

The confidential rating blank submitted by this hospital, and confirmed, is to be the sole determinant of the order of our preference among our applicants

Signed _____

Official Position _____

_____
Date

The Matching Program is the official cooperative plan for Internship Appointment of the American Hospital Association, the American Protestant Hospital Association, the Association of American Medical Colleges, the Catholic Hospital Association, the Council on Medical Education and Hospitals of the American Medical Association, the Student American Medical Association, and the medical services of the federal agencies offering internships

Directory of Approved Internships

Council on Medical Education and Hospitals of the American Medical Association
535 North Dearborn Street, Chicago 10

Revised to September 1, 1960

Hospitals 856 Internships 13 032

Intern training programs in the following general hospitals reviewed by the Internship Review Committee and approved by the Council on Medical Education and Hospitals are considered to furnish acceptable intern training in accord with the standards adopted by the House of Delegates of the American Medical Association and published in the Essentials of an Approved Internship immediately following this list Three types of internships are approved by the Council—rotating, mixed, and straight—and their descriptions are contained in the Essentials

A major change in format appears with this issue since some of the data formerly listed only for those hospitals with approved intership now appear in the consolidated list of all hospitals with approved graduate training program on pages 585-625 which precede the description of the National Intern Matching Program This has permitted inclusion of additional more specific data regarding each individual program than was possible previously The term Hospital has been omitted to save space since the full name and address as well as the medical school affiliation type of hospital control, total beds and autopsy percentage appears in the consolidated list

If the name of the program director is not listed inquiries should be directed to the Chairman of the Intern Committee

The average daily census permits a calculation of the occupancy in relation to the total beds

The average daily census multiplied by 365 gives the total inpatient days The total admissions divided into the total inpatient days gives the average length of hospital stay a useful figure for comparing the performance of general hospitals admitting patients with short-term illnesses

The total number of deaths and the total autopsies are the basis for the hospital autopsy percentage reported in the consolidated list and permit an actual measure of the mortality rate in the hospital in relation to the total admissions This mortality rate provides an interesting measure of the nature of the illnesses admitted to the hospital

Total outpatient visits is a figure which may also include emergency room visits but gives a measure of the ambulatory patient load at the hospital

The affiliated services are indicated by footnotes and the hospitals involved are identified by name on page 656 at the end of this list

The beginning stipend per month is not listed for the majority of federal hospitals, since stipends in the uniformed services are determined in relation to military rank or grade rather than to intern status For non-federal hospitals the beginning stipend is stated and the initials FM signify full maintenance while PM signifies partial maintenance Where neither initials appear no degree of maintenance is provided except for the stipend An asterisk (*) signifies that for the intern with dependents the hospital provides either a higher stipend or other forms of full or partial maintenance

The authorized complement of interns indicates the number requested by the hospital and approved by the Council The total interns sought through the NIMP may be equal to or less than the total complement authorized but may not exceed it

The types of internships are identified by nine different footnotes, of which the first six identify the major component or components available in the mixed internship programs offered If a hospital offers mixed internships which permit a major assignment in either of four different specialties then the mixed internship would carry four footnotes

Footnotes for mixed internships (major component) are [1]medicine, [2]surgery, [3]obstetrics [4]pediatrics [5]pathology, [6]psychiatry (See the new description of the mixed internship in the Essentials)

All internships in the approved list are of 12 months duration unless carrying footnote[7] Footnote[7] indicates the hospital may offer some intern appointments longer than 12 months in duration

Footnote[8] indicates the internship equivalent is included in the two year Family Practice program

Footnote[9] indicates the hospital does not participate in NIMP Hospitals not participating in the Matching Program can be identified in three ways—by footnote number[9] by a blank in the column for interns sought through NIMP, and by a blank in the column showing the NIMP code All other hospitals participate in the Matching Program

For internships in Air Force, Army Navy or Public Health Service hospitals, applications should be directed to the Medical Departments of the appropriate service and not to the individual hospitals Although applications are made to the service rather than to the individual hospitals all of the services ask students to list three hospitals in order of preference Every possible effort is made to place successful candidates in accordance with their desires but it should be understood that students may, in some instances, be assigned to other hospitals than those for which they have indicated a preference, if the needs of the service should so dictate

The number and type of internships as listed represent appointments offered for the intern year 1961-62, while the data describing the various hospitals represent a 12-month period ending generally September 30 1959

FEDERAL

Name of Hospital and Location	Program Director	Average Daily Census	Total Admissions	Total Number of Deaths	Autopsies	Outpatient Visits	Affiliated Services	Beginning Stipend (Month)	Authorized Complement	Type	Total Sought Through NIMP	NIMP Code
UNITED STATES ARMY—Hospitals, 10, Internships, 238												
CALIFORNIA												
SAN FRANCISCO												
Letterman General Hospital		667	11,573	224	190	251,555	No		24	Rot		
COLORADO												
DENVER												
Fitzsimons General Hospital		816	10,018	136	119	141,793	No		24	Rot		
DISTRICT OF COLUMBIA												
WASHINGTON												
Walter Reed General Hospital		1,206	14,367	397	331	210,898	122		30	Rot		
GEORGIA												
FORT BENNING												
Martin Army Hospital		319	12,450	68	56	409,723	No		16	Rot	182 Rotating General 00311 Office of the Surgeon General Department of the Army Washington 25 D C Attn Chief Personnel and Training Division	
HAWAII												
HONOLULU												
Tripler Army Hospital		716	19,562	191	148	224,967	No		30	Rot		
KENTUCKY												
FORT KNOX												
Ireland Army Hospital		329	13,386	63	36	331,628	No		16	Rot		
NORTH CAROLINA												
FORT BRAGG												
Womack Army Hospital		317	12,103	88	76	251,591	No		16	Rot		
TEXAS												
EL PASO												
William Beaumont General Hosp		410	15,046	179	158	296,842	No		28	Rot		
SAN ANTONIO												
Brooke General Hospital Fort Sam Houston		721	15,953	432	379	335,475	No		30	Rot		
WASHINGTON												
TACOMA												
Madigan General Hospital		460	11,420	107	97	193,788	No		24	Rot		
UNITED STATES AIR FORCE—Hospitals, 1, Internships, 92												
TEXAS												
SAN ANTONIO												
U S Air Force Hospital		888	19,116	199	179	349,165	No		36	Rot	92 Rotating General 00311 Directorate of Staffing and Education, Office of the Surgeon General Headquarters U S Air Force Washington 25 D C	
56 of the above 92 Air Force internships are divided among the Army hospitals listed above												
UNITED STATES NAVY—Hospitals, 14, Internships, 176												
CALIFORNIA												
OAKLAND												
U S Naval Hospital		944	15,485	150	139	221,727	No		18	Rot		
OCEANSIDE												
U S Naval Hospital		669	11,030	91	85	160,257	No		10	Rot		
SAN DIEGO												
U S Naval Hospital		1,605	25,337	467	402	413,191	No		24	Rot		
FLORIDA												
JACKSONVILLE												
U S Naval Hospital		312	8,016	114	111	152,664	No		6	Rot		
PENSACOLA												
U S Naval Hospital		284	6,847	79	63	165,301	No		6	Rot		
ILLINOIS												
GREAT LAKES												
U S Naval Hospital		800	11,149	68	67	87,328	No		10	Rot		
MARYLAND												
BETHESDA												
U S Naval Hospital		747	12,454	245	224	108,050	No		18	Rot	176 Rotating General 00311 Bur of Medicine and Surgery Navy Department Washington 25 D C	
MASSACHUSETTS												
CHELSEA												
U S Naval Hospital		463	8,136	105	88	71,673	No		12	Rot		
NEW YORK												
NEW YORK CITY												
U S Naval Hospital		897	10,343	184	177	83,791	No		18	Rot		
PENNSYLVANIA												
PHILADELPHIA												
U S Naval Hospital		866	11,209	290	168	109,319	No		16	Rot		
RHODE ISLAND												
NEWPORT												
U S Naval Hospital		335	7,040	47		122,593	No		6	Rot		
SOUTH CAROLINA												
CHARLESTON												
U S Naval Hospital		230	6,140	69		96,189	No		6	Rot		
VIRGINIA												
PORTSMOUTH												
U S Naval Hospital		1,185	20,498	158		184,566	No		20	Rot		
WASHINGTON												
BREMERTON												
U S Naval Hospital		202	3,731	46	43	42,641	No		6	Rot		
UNITED STATES PUBLIC HEALTH SERVICE—Hospitals, 7, Internships, 90												
CALIFORNIA												
SAN FRANCISCO												
U S Public Health Service Hospital		347	4,792	81	65	75,788	114		12	Rot		

Abbreviations and other references are listed on pages 656 and 657

FEDERAL

Name of Hospital and Location	Program Director	Average Daily Census	Total Admissions	Total Number of Deaths	Autopsies	Outpatient Visits	Affiliated Services	Beginning Stipend (Month)	Authorized Complement	Type	Total Sought Through NIMP	NIMP Code
LOUISIANA												
NEW ORLEANS												
U S Public Health Service Hospital		337	5 332	75	64	74 294	1 5		12	Rot	90 Rotating General Public Health Service Hosps Public Health Service Dept of Health Education and Welfare Washington 25 D C Attn Chairman Committee on Residents and Interns	00111
MARYLAND												
BALTIMORE												
U S Public Health Service Hospital		247	4 729	102	85	62 295	1 8		12	Rot		
MASSACHUSETTS												
BOSTON												
U S Public Health Service Hospital		178	3 322	50	41	45 784	169		10	Rot		
NEW YORK												
NEW YORK CITY												
U S Public Health Service Hospital		640	10 641	140	129	121 162	219		24	Rot		
VIRGINIA												
NORFOLK												
U S Public Health Service Hospital		186	3 442	73	43	47 251	271		8	Rot		
WASHINGTON												
SEATTLE												
U S Public Health Service Hospital		235	3 816	90	71	73 221	246		12	Rot		
DEPARTMENT OF HEALTH EDUCATION AND WELFARE—Hospitals 2, Internships 34												
WASHINGTON D C												
Freedmen s Hospital		392	13 474	477	211	58 820		248PM	22	Rot	22	79811
St Elizabeths Hospital		1 980	1 607	475	218	47 030	125	316PM	12	Rot	12	80411
OTHER FEDERAL—Hospitals 1 Internships 16												
BALBOA HEIGHTS CANAL ZONE												
Gorgas Hospital		265	8 641	146	108	187 408		310 None	16	Rot	16	80611
NONFEDERAL AND VETERANS ADMINISTRATION												
ALABAMA—Hospitals 6 Internships 113												
BIRMINGHAM												
Birmingham Baptist	D I Lovell	312	14 114	356	141		160	300FM	12	Rot	12	90311
Carraway Methodist	William M Harris	199	13 892	190	47	176 089		250FM	9	Rot	9	00611
St Vincent	F B Glenn	177	8 743	210	81	51 59	100	200FM	8	Rot	8	85111
University Hospital and Hillman Clinic		463	23 865	718	327	105 724	101	100FM	36	Rot	36	00711
									12	St Med	12	00732
									6	St Ped	6	00734
									1	St Path	1	00736
FAIRFIELD												
Lloyd Noland	Robert W Grady	233	11 100	218	103	152 212		225PM	14	Rot	14	00811
MOBILE												
Mobile General	F R Cciano	195	7 999	459	244	33 913		200PM*	15	Rot	15	85211
ARIZONA—Hospitals 6 Internships 62												
PHOENIX												
Good Samaritan	Leslie B Smith	482	23 320	295	185	40 843	102	250PM	18	Rot	18	01111
Maricopa County General	Thomas H Late	343	7 348	671	300	53 420		292PM	12	Rot	12	89811
St Joseph s	Robert F Flynn	308	23 401	305	281	56 436		150FM*	15	Rot	15	01211
TUCSON												
St Mary s	Loui Hirsch	260	16 286	344	1	17 408	103	150FM*	9	Rot	9	01411
Tucson Medical Center	Stuart Westfall Gerd I Schlos	235	13 037	221	114	10 757	103	150FM	8	Rot	8	01511
ARKANSAS—Hospitals 3 Internships 61												
LITTLE ROCK												
Arkansas Baptist	W G Cooper Jr	315	19 557	433	125	11 990		275FM	16	Rot	16	01611
St Vincent Infirmary	Frank Bauer	273	15 322	269	100	3 970	104	275FM	12	Rot	12	01711
University	John I Riggin Jr	271	16 139	487	315	84 141	105	150 None	6	Rot	6	01811
									9	Mixed 1 to	9	01820
									6	St Med	6	01832
									3	St Surg	3	01833
									3	St Ped	3	01834
									2	St Path	2	01836
									4	St Ob Gyn	4	01835
CALIFORNIA—Hospitals 46 Internships 892												
ARLINGTON												
General Hospital of Riverside County	George J Vadas	300	4 902	484	256	34 962		214PM	12	Rot	12	85011
BAKERSFIELD												
Kern County General	Charles P Marvin	405	9 340	650	371	107 318		250 None	12	Rot	12	92111
BERKELEY												
Herrick Memorial	Sheldon Margen	155	7 856	189	110	43 099	104	150FM*	6	Rot	6	02011
FRESNO												
General Hospital of Fresno County	W Walter Runinson	569	10 934	779	341	73 746		250PM	18	Rot	18	02211
GLENDALE												
Glendale Sanit and Hospital	Albert E Brown	278	12 239	342	183	45,523		300PM	12	Rot	12	02311
LOMA LINDA												
Loma Linda Sanitarium and Hospital	B D Briggs	118	6,248	138	90	31 105	107	300 None	10	Rot	10	02411
LONG BEACH												
Memorial Hospital of Long Beach	George N Trimble	258	15 785	456	111	70 050	107	250PM	15	Rot	15	02711
St Mary s Long Beach	Carl F Bellis	235	17 692	298	151	22 236		250FM*	6	Rot	6	02511
LOS ANGELES												
California	Robert H Wier	239	13 245	304	168	27 699	108	200FM*	8	Rot	8	02911
Cedars of Lebanon	Harold Mazur	363	17,904	538	242	111 804	107	135FM*	15	Rot	15	03011
Childrens	Robert Ward	178	9 190	291	282	108 981		125PM	4	St Ped	4	03134
Hospital of the Good Samaritan	Arthur S Beattie	367	15 180	419	184	27 639	169	300FM	8	Rot	8	03211

Abbreviations and other references are listed on pages 656 and 657

Name of Hospital and Location	Program Director	Average Daily Census	Total Admissions	Total Number of Deaths	Autopsies	Outpatient Visits	Affiliated Services	Beginning Stipend (Month)	Authorized Complement	Type	Total Sought Through NIMP	NIMP Code
Los Angeles County (Medical Unit)	William F Nerlich	2 229	89,268	5,724	2,351	593 101		175PM*	152	Rot	152	03311
Presbyterian Hospital—Olmsted Memorial	F E Davis								8	St Med	8	03339
Queen of Angels		209	10 528	353	139	31 903		229PM	10	Rot	10	03511
St Vincent's	Russell Smith	293	17,645	486	244	19 678		225FM	16	Rot	16	03611
Santa Fe Coast Lines	Russell Tyler	240	12 038	279	95	15 484		250FM	6	Rot	6	03711
University of California Hospital	F V Maloney Jr	151	5,107	160	83	30 330	109	200FM*	9	Rot	9	03811
		248	9 426	416	352	87 327		185 None	12	St Med	12	03931
									8	St Surg	8	03933
									6	St Ped	6	03934
									2	St Path	2	03936
Veterans Administration	Stewart G Tuttle	3 419	13 166	1,136	906	35 162	110	208FM	24	Rot	24	03911
									6	St Med	6	03939
White Memorial	Robert F Chinnock	202	9 140	313	232	104 061		205PM	15	Rot	15	04011
OAKLAND												
Highland-Alameda County	G Otis Whitecotton	372	17,242	660	368	152 906	111	115FM	34	Rot	34	04111
ORANGE												
Orange County General	George F Warner	391	7 216	382	405	86 971		300 None	26	Rot	26	04311
PALO ALTO												
Palo Alto-Stanford Center	Halsted Holman J Garrott Allen	287	17 117	363	165	37 258		225 None	7	St Med	7	89039
									6	St Surg	6	89033
PASADENA												
Collis P and Howard Huntington Memorial	Walter B Hill	239	12 060	335	176	24 803	107	250FM*	9	Rot	9	04411
SACRAMENTO												
Sacramento County		780	13 422	1 196	152			210FM	26	Rot	26	04611
SAN BERNARDINO												
San Bernardino County Charity	James I Cunningham	300	7 880	602	297	79 445		250FM	16	Rot	16	04711
SAN DIEGO												
Mercy	John J Kelly Jr	274	18,337	438	248	36 952		150FM	12	Rot	12	04811
San Diego County General	Harry B Friedgood	359	9 554	547	264	34 990		200FM	20	Rot	20	04911
SAN FRANCISCO												
Children's	Theodore I Bartelmez	190	10 309	165	95	54 007		200FM*	6	Rot	6	05011
Franklin	Frank W Van Kirk Jr	188	6 987	151	83	29 256	112	150FM*	6	Rot	6	05111
French	Dwight Wilbur	142	6 819	229	89	30 210		125LM	10	Mixed [1] [2]	10	05990
Kaiser Foundation	A H Lieberman	194	11 567	276	206	466 979		240FM*	20	Rot	20	05911
Mary's Help	Albert G Clark	143	7 734	186	82	26 055		150FM*	6	Rot	6	05311
Mount Zion	J R Greenberg	280	12,680	324	230	35 654		150FM	18	Rot	18	05411
Presbyterian Medical Center	Victor Richards	215	9 727	295	207	52 774		75	12	Rot	12	06111
St Joseph's	Francis J Gasparini	171	8 193	219	76	7 414	112	175FM*	6	Rot	6	05511
St Luke's	Stanley J Wolfe	195	10 328	236	128	59 427		300FM	12	Rot	12	05611
St Mary's	George H Reifenstein	280	12 525	252	196	50 471		150FM*	15	Rot	15	05711
San Francisco General	Norman Sweet	950	19 665	1,400	906	65 349		160 None	48	Rot	48	05811
									12	Mixed [1]	12	05890
Southern Pacific General		377	7 115	275	193	41 711	113	125FM	25	Rot	25	06031
University of California Hospitals (Herbert C Moffitt)	Leon Goldman	359	13 411	434	368	129 800		195FM	17	St Med	17	06939
									17	St Surg	17	06933
									10	St Ped	10	06234
									3	St Path	3	06936
SAN JOSE												
Santa Clara County	R Morton Manson	316	6,485	617	413	93 948		145FM	20	Rot	20	06311
SANTA BARBARA												
Santa Barbara Cottage	Robert I Cord	156	8 956	190	125	7 188	115	175FM*	10	Rot	10	06411
SANTA MONICA												
Santa Monica	Allen H Weiss	180	13 476	274	121	55 667	116	200FM	8	Rot	8	06611
STOCKTON												
San Joaquin General	Duane D Deakins	469	7 356	669	377	45 178		190PM	17	Rot	16	02111
TORRANCE												
Harbor General	Dirk M Te Groen	503	12 270	1 068	541	127 773		175FM	38	Rot	38	06711
COLORADO—Hospitals, 12, Internships, 166												
COLORADO SPRINGS												
Penrose	Carl S Gydesen	164	6 452	211	149	39 599		150PM	6	Rot	4	06811
DENVER												
Univ of Colo Medical Center Colorado General	C Wesley Eisele	219	7,650	390	308	117 673	145	115PM	18	Rot	18	07611
									2	St Surg	2	07633
									4	St Ped	4	07634
Denver General	N Paul Isbell	354	9 718	696	514	89 842	144	60FM	24	Rot	24	07711
									16	Com Rot	16	07710
General Rose Memorial	Martin M Alexander	246	11 526	271	162	14 959	117	250FM	10	Rot	10	06911
Mercy	Robert J Hawley	285	11,820	230	122	7 027		215PM	11	Rot	11	07211
Porter Sanit and Hospital	Adrian Baer	185	10,468	205	113	14 963	118	150PM	12	Rot	10	07111
Presbyterian	A E Lubchenco	185	11 012	287	177	12 327	118	215PM	13	Rot	13	07211
St Anthony	Richard E Boyle	297	15 286	365	204	11 344		250FM*	10	Rot	10	07311
St Joseph's	F B McGlone	359	17,830	387	225	14 055		150FM	14	Rot	14	07411
St Luke's	Marshall G Nims	408	18 281	486	315	11 174	119	215PM	14	Rot	14	07511
GREELEY												
Weld County General		186	10 927	287	141	3 487		150FM*	4	Rot	4	8 311
PUEBLO												
St Mary-Corwin	David E Morton	295	14,254	357	137	20 515		210PM	8	Rot	8	07811
CONNECTICUT—Hospitals, 21, Internships, 231												
BRIDGEPORT												
Bridgeport	Russell H Pope	359	19 187	588	228	11,130		190FM	14	Rot	14	07911
St Vincent's	William H Curley	319	18 315	522	224	8 493		250PM	15	Rot	15	08011
BRISTOL												
Bristol	Robert J Williamson	150	9,138	209	52	12 157		150FM	6	Rot	6	92311
DANBURY												
Danbury	Raphael D Schwartz	175	8,683	249	105	20 350		200FM*	8	Rot	8	06111
DERBY												
Griffin	Vincent A DeLuca, Jr	123	6,216	229	86	15 106	120	200FM	7	Rot	7	07711
GREENWICH												
Greenwich	Norman W Keller	198	8 439	235	178	27 331		150FM*	10	Rot	10	06211

Abbreviations and other references are listed on pages 656 and 657

Name of Hospital and Location	Program Director	Average Daily Census	Total Admissions	Total Number of Deaths	Autopsies	Outpatient Visits	Affiliated Services	Beginning Stipend (Month)	Authorized Complement	Type	Total Sought Through NIMP	NIMP Code
CONNECTICUT—Continued												
HARTFORD												
Hartford	John C Leonard	778	31 521	893	613	23 766		100FM	18	Rot [7]	18	08311
Hartford Municipal Hospital and Health Center	Myron F Freedman	174	4 415	168	78	26 793		225FM	10	Rot	10	08411
Mount Sinai	Isadore Rothstein	105	7 029	115	48	7 807		200FM	6	Rot	6	85411
St Francis	William F Fahey	381	23 327	453	238	20 737		150FM	13	Rot	13	08511
MANCHESTER												
Manchester Memorial	Edward F Beier	191	11 576	230	125	11 715		375 None	4	Rot	4	85511
MERIDEN												
Meriden		177	10 515	303	105	7 634		150FM	5	Rot	5	08611
MIDDLETOWN												
Middlesex Memorial	Morris J Seide	143	8 198	265	129	25 490		200FM	4	Rot	4	08711
NEW BRITAIN												
New Britain General	Howard Levine	261	14 172	368	138	51 887		200FM	9	Rot	9	08811
NEW HAVEN												
Grace-New Haven Community		520	22 602	912	612	93 915	121	225FM	15	St Med	15	08932
									16	St Surg	16	08933
									7	St Ped	7	08934
									7	St Path	7	08936
Hospital of St Raphael	Charles F Litzkoff	307	13 064	565	256	18 555		250FM	15	Rot	15	09011
NEW LONDON												
Lawrence and Memorial	Edward Lipton	176	7 892	214	143	26 020		200FM	4	Rot	4	09211
NORWALK												
Norwalk	Allen M Margold	83	12 701	296	194	9 327		160FM	12	Rot	12	09311
STAMFORD												
Stamford	John B Oliver	242	10,864	251	209	34 451		150FM	10	Rot	10	09511
WATERBURY												
St Mary's	William Finkelstein	311	14 778	432	214	34 504		200FM	7	Rot	7	09611
Waterbury	Orpheus F Bizzozero	293	13 195	462	220	62 904		200FM	9	Rot	9	09711
DELAWARE—Hospitals 3 Internships 34												
WILMINGTON												
Delaware	C Barrett Heckler	307	13 627	409	334	67 024		190FM*	16	Rot	16	09811
Memorial	Leonard P Lang	279	11 261	348	224	96 740		190FM	12	Rot	12	09911
Wilmington General	Joseph F Hughes	154	8 895	214	97	16 673		190FM	6	Rot	6	10011
DISTRICT OF COLUMBIA—Hospitals 8 Internships 203												
WASHINGTON D C												
District of Columbia General	John D Schultz	988	30,551	1,574	745	156 057		208 None	62	Rot	62	79911
Doctor	Anson R Hyde	201	13 068	281	183		123	150FM	12	Rot	6	79711
Georgetown University Hosp	Lawrence H Kyle	315	15 073	409	261	66 923	124	150PM	6	Mixed [1]	6	80120
	Robert J Coffey								10	St Med	10	80132
George Washington Univ Hosp	John Park	357	16 210	388	280	41 178	125	185FM	26	Rot	26	80211
Providence	George D Cartland	295	16 798	407	190	47 215		300PM	18	Rot	18	80311
									4	St Surg	4	80333
Sibley Memorial	Richard F Mandelbold	158	10 190	263	145	4 724	123	100FM	10	Rot	10	80511
Washington Hospital Center (Central Dispensary and Emergency Hosp and Garfield Memorial)	Thomas W Mattingly	604	33 555	712	407	129 144	123	200FM	36	Rot	36	80011
									4	St Surg	4	80033
Washington Sanitarium and Hospital	William C Swatek	215	10 133	305	125	43 269	120	225PM	13	Rot	13	25411
FLORIDA—Hospitals 16 Internships 264												
GAINESVILLE												
University of Florida Teaching Hospital and Clinic		108	2 216	100	94	19 878		200 None*	8	St Med	8	82432
									8	St Surg	8	82433
									5	St Ped	1	82434
									1	St Path		
JACKSONVILLE												
Baptist Memorial	Rudolph H Oppenheimer	290	17 085	199	116	4 651		300 None	12	Rot	12	97011
Brewster Methodist	David Booher	105	4 766	129	42	4 840		225FM	6	Rot	6	82511
Duval Medical Center		222	8 961	48	252	99 401		175FM	20	Rot	20	10111
St Luke's	Irvin C Schneider	173	10 005	214	76	10 000	12	300 None	4	Rot	4	10211
St Vincent's	Samuel M Day	317	19 912	334	167	39 057		300PM	18	Rot	18	10311
MIAMI												
Jackson Memorial	Warren W Quillian	504	31 548	1 676	900	209 009	128	180PM*	60	Rot	60	10411
									12	St Med	12	10432
									8	St Surg	8	10433
									2	St Ped	2	10434
Mount Sinai	Joseph W Ketzky	220	10 135	351	173	13 856		150FM	18	Rot	18	10511
MIAMI BEACH												
St Francis	Donald C Stimmus	18	9 359	238	87	23 481	128	135FM	8	Rot	8	10611
ORLANDO												
Orange Memorial	Oscar W Freeman	306	17 205	545	240	20 001		300 None	12	Rot	12	10711
PENSACOLA												
Baptist	Robert Price											
	W R Rundle	182	15 000	170	84	25 000	292	275PM	6	Rot	6	82611
Sacred Heart	W R Rundle	112	6 597	144	51	21 141	129	200FM	3	Rot	3	10811
ST PETERSBURG												
Mound Park	Victor A Byrne	376	15 297	569	277	31 347	130	290PM	16	Rot	16	91111
TAMPA												
Tampa General	David P Baumann	304	20 230	544	181	15 485	131	200FM	26	Rot	26	10911
WEST PALM BEACH												
Good Samaritan	Charles M Harris	177	9 825	350	105		132	200FM	5	Rot	5	95411
St Mary's	David W Martin	125	6 591	304	131	21 270		200PM	6	Rot	6	91411
GEORGIA—Hospitals 15 Internships 221												
ATHENS												
Athens General	W Harvey Cabaniss	112	6 563	188	47	15 638		330 None	6	Rot	6	85611
St Mary	John E Stegeman	81	4 591	124	52	17 102	133	300PM	5	Rot	5	11011
ATLANTA												
Crawford W Long Memorial	Wadley R Glenn	364	22 908	423	209	18 950	134	275 None	18	Rot	18	11111
Emory University Hosp		242	10 782	301	181		135	225PM	6	St Surg	6	11933
									2	St Path	2	11936
Emory University-Veterans Admin	J Willis Hurst								16	St Med	16	11732
Emory University Hosp		242	10 782	301	181			225PM				
Veterans Administration		279	4,307	253	135			208FM				

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Name of Hospital and Location	Program Director	Average Daily Census	Total Admissions	Total Number of Deaths	Autopsies	Outpatient Visits	Affiliated Services	Beginning Stipend (Month)	Authorized Complement	Type	Total Sought Through NIMP	NIMP Code
GEORGIA—Continued												
Georgia Baptist	A H Letton	414	23,601	390	167	22,534		330PM	20	Rot	20	11911
Grady Memorial		468	25,880	1,128	450	394 467		75PM	24	Rot	24	11311
									16	St Med	16	11333
									8	St Surg	8	11333
									4	St Ped	4	11334
Piedmont	Walter Lyon Bloom	205	11,065	144	77	11 124	134	275PM	10	Rot	10	11411
St Joseph's Infirmary	P C Shea	296	14,658	297	176	17 951		255PM	12	Rot	12	11511
AUGUSTA												
Eugene Talmadge Memorial	Frank Anderson	285	5,744	259	199	15 437		175 None	4	St Med 9		
University	J D Gray	305	17,044	429	166	38 964		200PM	18	Rot	18	11611
COLUMBUS												
Medical Center	Edgar B Horn	233	12 298	413	140	27 958		300FM	12	Rot	12	11811
MACON												
Macon	Allan A Cole	342	25 206	500	129	61 285		225FM	24	Rot	24	19011
ROME												
Floyd	William P Harbin	154	10 903	196	64	33 59	136	250FM*	6	Rot	6	99911
SAVANNAH												
Memorial		154	10 218	358	192	17 154		250FM	10	Rot	10	9111
HAWAII—Hospitals, 3, Internships, 41												
HONOLULU												
Kuakini	Shizue Kuramoto	131	7,966	229	119	4 150	137	150FM	14	Rot 7	7	80711
Queen's	Sumner Price	303	19,307	362	276	41,353		175FM	15	Rot	15	80811
St Francis	George H Nip	173	10,680	171	113	48 234		225FM	12	Rot	12	80911
ILLINOIS—Hospitals, 49, Internships, 790												
BERWYN												
MacNeal Memorial	Duane M Farley	237	15 754	413	211	42 263		225FM	13	Rot	13	12111
BLUE ISLAND												
St Francis	Robert F Field	173	8,958	236	87	12 682	138	175FM	7	Rot	7	99911
CHICAGO												
American	David Goldfinger	115	5 516	192	90	9 500		200FM	5	Rot	5	12311
Augustana	Hugo O Deuss	267	9 255	350	175	3 151		150FM	10	Rot	10	12411
Chicago Wesley Memorial	Thomas C Laipply	500	18 474	436	245	30 831	139	100FM	24	Rot	24	16911
Columbus	Edmund F Foley	355	14,454	346	163	26 037	140	250FM	16	Rot	16	17611
Cook County	S H Armstrong	2 708	94 566	6 220	2,485	242 749		110FM	124	Rot	124	12511
Edgewater	John D Singer	252	12 419	279	169	9 768		150FM	16	Rot	16	12811
Englewood	Harry D Hodges	131	8,023	250	104			150FM	6	Rot	6	12911
Evangelical	P F Hopkins	163	8,104	310	106	19 425		150FM*	7	Rot	7	13011
Grant	W A Hutchinson	195	11 193	277	156	22 503		200FM	11	Rot	11	13111
Hospital of St Anthony de Padua	I D Friedman	165	7 942	250	92	2 194		300FM	8	Rot	8	13211
Illinois Central	C J Bidwell	216	8,334	227	134	25,439	141	263FM	12	Rot	12	13611
Illinois Masonic	Otto Schwartz	380	17 286	595	244	50 258		150FM*	16	Rot	12	13711
Jackson Park	Edward Goldberg	100	3 852	147	59	5,872		150FM	6	Rot	6	13811
Loretto	C J Thill	128	5 737	174	90	11 424		150FM	7	Rot	7	13911
Lutheran Deaconess	W J Fraund	169	7 778	285	123	2 362		150FM	5	Rot	5	14011
Mercy	J R Christian	282	9,577	312	151	67 530		200FM*	15	Rot	15	14111
Michael Reese	Rachmiel Levine	762	24,022	689	495	92 006		100FM*	36	Rot	36	14211
									2	St Med	2	14232
									2	St Surg	2	14233
									2	St Ped	2	14234
Mount Sinai	F E Mandel	343	12,368	471	268	50,916		175PM	14	Rot	14	14411
Norwegian-American	John Cavenagh	138	7,690	227	71	1 979	142	200FM	12	Rot	12	14511
Passavant Memorial	Wm R Roach	245	11 859	280	168		139	200PM	18	Rot	18	14611
Presbyterian-St Luke's	Joseph Davis	736	28 150	433	316	106 192		100FM	39	Rot	39	14711
Provident	H B Matthews	166	9 343	212	116	51 577		175FM	10	Rot	10	14811
									1	St Surg	1	14833
Ravenswood	Marshall Field	203	9 556	340	203	15 648		250FM	8	Rot	8	14911
Resurrection	C W Pfister	192	10,060	208	139	48 875		250FM	12	Rot	12	93711
St Anne's	J E Segraves	263	17 354	472	156	30 936		225FM*	12	Rot	12	15211
St Bernard's	Gordon McCoy	141	6,051	208	82	18 660		150FM*	8	Rot	8	15311
St Elizabeth's	J S Sluzynski	231	12 875	299	127	24 172		200FM	10	Rot	10	15411
St Joseph	E J Del Beccaro	163	6 919	187	104	14 003		250FM	8	Rot	8	15511
St Mary of Nazareth	J S Drabanski	231	11 036	447	164	11 564		200FM*	10	Rot	10	15711
South Chicago Community	A S Daniel	223	10 119	312	105	13,203		150FM	12	Rot	12	15811
South Shore	A C Guzauskas	148	7 134	233	88	12,799		200FM	7	Rot	7	92511
Swedish Covenant	J C Kulis	191	8 632	268	150	26,282		200FM	9	Rot	9	15911
Univ of Chicago Clinics	Robert G Page	545	16 471	563	452	196 295		175PM	42	Rot	42	16011
									2	St Ped	2	16034
Univ of Illinois Research and Educational	Donald J Caseley	482	11,712	384	321	189,051		80FM	36	Rot	36	16111
Woodlawn	A F Bulfer	106	4 488	109	79	5 085		100PM*	6	Rot	6	16411
DECATUR												
Decatur and Macon County	R B Olstad	212	17 079	380	138	59,000	143	275FM	9	Rot	9	16511
EVANSTON												
Evanston	Thomas W McElin	317	15 166	352	271	11,687	139	200PM	24	Rot	21	16711
St Francis	Alfred C Ledoux	336	15 125	476	283	52,591		250FM	14	Rot	14	16811
EVERGREEN PARK												
Little Company of Mary	F W Young	378	20 398	617	229	48 927		200FM*	24	Rot	24	16911
HINSDALE												
Hinsdale Sanitarium and Hospital	P G Fredrickson	184	8 233	228	112	40 037		300PM	10	Rot	10	90311
OAK PARK												
Oak Park	John W Tope	181	9,279	295	140	17,115		200FM	12	Rot	12	17311
West Suburban	Joseph B Moles	296	12,932	475	207	29 847		200FM	15	Rot	15	17411
PEORIA												
Methodist of Central Illinois	H Ivan Brown	344	13,339	351	182	30,324		125FM*	16	Rot	16	17511
St Francis		538	23,876	568	309	16 445		200FM	18	Rot	18	17611
ROCKFORD												
Rockford Memorial	V M Bowers, Jr	196	12,197	273	253	45,217		200FM	8	Rot	8	17711
St Anthony	John J Bailey	162	8,307	282	133	15,897		150FM	6	Rot	6	17811
Swedish-American	John E Berry	168	9,358	248	107	25,872		150FM	8	Rot	8	17911
INDIANA—Hospitals, 14, Internships, 185												
EAST CHICAGO												
St Catherine	L H Steen	280	11,778	392	182	9 049		300FM	8	Rot	8	18111

Abbreviations and other references are listed on pages 656 and 657

Name of Hospital and Location	Program Director	Average Daily Census	Total Admissions	Total Number of Deaths	Autopsies	Outpatient Visits	Affiliated Services	Beginning Stipend (Month)	Authorized Complement	Type	Total Sought Through NIMP	NIMP Code
INDIANA—Continued												
EVANSVILLE												
St Mary's	Robert A Royster	280	13 250	334	120	43 209		350FM	4	Rot	4	94111
FORT WAYNE												
Lutheran	Richard Craig	262	10 037	380	129	26 600		250FM	6	Rot	6	18311
GARY												
Methodist	M R Marshall	246	12 028	463	275	14 929		250FM	12	Rot	12	86011
St Mary Mercy	Ronald H Doneff	294	13 871	485	165	23 250		250FM	8	Rot	8	18411
HAMMOND												
St Margaret	Nicholas Lenatz	304	16 [illegible]	487	177	18 494		350FM*	12	Rot	12	18511
INDIANAPOLIS												
Indiana University Medical Center	W Donald Cloe	411	14 951	588	442	70 490	146	200PM	18	Rot	18	18711
									8	St Med	8	18732
									6	St Surg	6	18733
									3	Family Practice[5]	3	18718
Marion County General	Henry M Parrish	511	15 246	895	394	169 072		240PM	40	Rot	40	18611
Methodist	M S Bacastow	619	30 955	498	244	54 435		215PM	19	Rot	19	18811
St Vincent's	Charles F Test	248	11 860	280	144	65 274		235FM	10	Rot	10	18911
LAFAYETTE												
St Elizabeth	H F Klepinger	275	11 305	434	115	819		235FM	4	Rot	4	19011
MUNCIE												
Ball Memorial	F E Stout	300	13 907	358	152	8 930		250FM	8	Rot	8	19211
SOUTH BEND												
Memorial	Donald I Olson	334	11 399	374	182	28 [illegible]38		300PM	10	Rot	10	19311
St Joseph's	Herbert Frank	180	9 799	267	103	20 235		350FM	9	Rot	9	19411
IOWA—Hospitals 7 Internships, 93												
CEDAR RAPIDS												
Mercy	Raymond Shank	181	11 140	207	11	11 791		250FM	10	Rot	10	19611
St Luke's Methodist	Charles Schwartz	263	13 067	337	17	20 265		250FM	13	Rot	13	19711
DES MOINES												
Broadlawns Polk County	D W Coughlan	148	5 751	227	113	51 707		200FM	16	Rot	16	19911
Iowa Lutheran	Lawrence Ely	207	9 869	239	75	10 906	147	200FM	10	Rot	10	20011
Iowa Methodist	Richard F Paul	355	16 549	361	217	23 685		200FM	10	Rot	10	20111
Mercy	Howard G Ellis	191	10 489	244	182	4 578		250FM	14	Rot	14	20211
IOWA CITY												
State University of Iowa Hospitals	I E January	754	23 037	820	570	146 900		175FM	20	Rot	20	20311
KANSAS—Hospitals 6 Internships 93												
KANSAS CITY												
Bethany	Lee E Rook	156	7 710	264	99	13 243		325FM	8	Rot	8	20511
St Margaret's	Paul Carpenter	187	8 132	247	102	8 884		300PM	8	Rot	8	20711
University of Kansas Medical Center	Frederick Kittle	414	16 415	605	381	157 452	148	100PM	12	Rot	12	20811
									7	Mixed[1 5]	7	20820
									1	St Med	1	20832
									1	St Surg	1	20833
									3	St Ped	3	20834
									1	St Path	1	20836
									4	Family Practice[5]	4	20818
WICHITA												
St Francis	J W Schman	256	28 600	432	282	2 819	149	250FM	18	Rot	18	20911
Wesley	M A Throckmorton	382	19 588	556	169	38 601	150	270FM*	18	Rot	18	21011
Wichita-St Joseph	Robert K Purves Richard J Taylor	252	13 850	198	65	35 143		300FM	12	Rot	12	21111
KENTUCKY—Hospitals 9 Internships, 122												
COVINGTON												
St Elizabeth	Marc Reardon	298	15 126	544	164	14 378		200FM	14	Rot	14	21211
LEXINGTON												
Good Samaritan	R D Shepard	203	10 419	331	118	30 098		150FM	5	Rot	5	21411
St Joseph	R J Angelucci	185	10 301	301	112	9 305		200FM	8	Rot	8	21511
LOUISVILLE												
Kentucky Baptist	J N Goldsborough	332	18 828	324	89	17 509	151	225PM	12	Rot	12	21611
Louisville General	J D Stevenson	280	11 616	64	460	199 915	151	100FM	22	Rot	22	21711
									8	St Med	8	21732
									2	St Surg	2	21733
									10	St Ped	10	21734
									2	St Path	2	21736
Norton Memorial Infirmary	B B Jackson	245	14 291	253	101	5 600	151	300FM*	6	Rot	6	21811
St Anthony	W I Hume Jr	211	11 905	310	81	6 493	152	300FM*	6	Rot	6	21911
St Joseph Infirmary	W F Rubel	367	22 027	420	180	22 562		210PM	18	Rot	18	22011
SS Mary and Elizabeth	F D Barlow	161	11 191	240	101	10 808	151	285PM	9	Rot	9	22111
LOUISIANA—Hospitals 10 Internships 264												
NEW ORLEANS												
Charity	Louis Burroughs	2 070	55 509	2 394	2 153	874 204		100FM	126	Rot	126	22411
Hotel Dieu	Carlo J Tripoli	242	13 665	328	99	13 947		150FM*	12	Rot	12	22511
Mercy	C F Bellone	162	10 914	215	85	18 585		175FM*	8	Rot	8	22611
Ochsner Foundation		219	9 030	196	167	102,555		125FM	4	St Med	4	96632
									4	St Surg	4	96633
Southern Baptist	C G Collins	396	20 597	500	205	31 193	153	175PM	24	Rot	24	22811
Touro Infirmary	Sam Threefoot	385	21 623	519	325	49 384	154	100FM*	25	Rot	25	22911
SHREVEPORT												
Confederate Memorial Medical Center	J H Campbell	705	28 166	884	275	149 644		100FM	46	Rot	36	23211
Doctor's Hosp and Research Foundation	A A Bullock	55	3 980	44	18	15 744	156	250FM	4	Rot	4	23011
Highland	C D Knight	86	5 943	70	22		156	250FM	4	Rot	4	82111
T F Schumpert Memorial	B C Garrett Jr	260	16 09	209	88	4 983		200FM*	7	Rot	7	23111
MAINE—Hospitals, 3 Internships, 22												
BANGOR												
Eastern Maine General	L L Weed	262	11 811	329	180	45 287		100FM	6	Rot	6	23311
LEWISTON												
Central Maine General	C F Branch	171	7 911	260	137	22 324		150FM	4	Rot	4	23411
PORTLAND												
Maine Medical Center	M S Bacastow	309	13,397	53	230	29 404		150FM*	12	Rot	12	23611

Abbreviations and other references are listed on pages 656 and 657

Name of Hospital and Location	Program Director	Average Daily Census	Total Admissions	Total Number of Deaths	Autopsies	Outpatient Visits	Affiliated Services	Beginning Stipend (Month)	Authorized Complement	Type	Total Sought Through NIMP	NIMP Code
MARYLAND—Hospitals, 19, Internships, 327												
BALTIMORE												
Baltimore City	P E Molumphy	1,270	14,710	706	437	75 040	157	150FM	6	Rot	6	23611
									2	Mixed[1]	2	23738
									2	Mixed[4]	2	23738
									8	St Med	8	23752
									6	St Surg	6	23833
									3	St Ped	3	23834
									4	Family Practice[8]	4	23738
Bon Secours	Edward J Krieg	192	9,144	247	75	14,707		225FM	10	Rot	10	23811
Church Home and Hospital	N J Kohlerman	154	5,879	160	84	15 146	158	175FM*	12	Rot	12	23911
									1	St Med	1	23939
Franklin Square	R G Chambers	147	6,565	173	105	11 454	159	200FM	9	Rot	9	24011
Hospital for Women	F W Barnes, Jr	127	8,053	97	54	16 414		200FM	6	Mixed[3]	6	24130
Johns Hopkins		830	25,363	1,076	736	390 737	160	160 None	16	St Med	16	24232
									11	St Med (Pvt)	11	24238
									12	St Surg	12	24233
									12	St Ped	12	24234
									4	St Path	4	24236
									9	St Ob Gyn	9	24235
Lutheran	Salvador Rossello	163	8,275	195	94	35 881	158	200FM*	10	Rot	10	24311
Maryland General	R Z Pierpont	268	10 886	384	171	12 350	158	200FM	14	Rot	14	24411
Mercy		236	11 001	325	153	99 094		225PM	16	Rot	16	24511
Provident	Effie O Ellis	116	5 503	219	114	53 135		200FM	9	Rot	9	24611
St Agnes	T S Bowyer	195	10,957	284	133	29 256	158	250FM	9	Rot	9	24711
St Joseph's	W J Supik	188	8 109	314	180	29 843	158	200FM	8	Rot	8	24811
Sinai	H H Gordon	267	16,177	372	219	69 167		120FM	4	Rot	4	24911
									10	Mixed[1-2 4]	10	24930
									5	St Med	5	24939
									1	St Surg	1	24933
									3	St Ped	3	24934
South Baltimore General	F R Shipley	141	6 045	230	78	31,245		175FM*	8	Rot	8	25011
Union Memorial	J M Classen	306	13 053	496	217	24 417	161	200FM*	13	Rot	13	25111
									5	St Surg	5	25133
University	J F Bradley	490	15 510	783	461	149 306		175PM	17	Rot	17	25211
									8	St Med	8	25232
									2	St Surg	2	25233
									3	St Ped	3	25234
BETHESDA												
Suburban	F C McGarity	159	9 691	282	137	10 847	123	150FM	19	Rot	19	23811
CHEVERLY												
Prince George's General	J R Compton	232	12 698	304	225	11 302		150FM	22	Rot	18	90511
HAGERSTOWN												
Washington County	D M Welty	230	11,300	387	144	21 248		250FM*	8	Rot	8	91511
MASSACHUSETTS—Hospitals, 40, Internships, 452												
BEVERLY												
Beverly	A E Parkhurst	157	8 464	157	112	26 708		200FM	8	Rot	8	25511
BOSTON												
Beth Israel		289	12,212	431	234	59 427	162	150 None	12	St Med	12	25632
									4	St Surg	4	25633
Boston City		1 037	31 698	1,877	1,089	409 876	163	135FM	16	St Med	16	25703
	I and III	Medical Tufts							16	St Med	16	25704
	II and IV	Medical Harvard							16	St Med	16	25705
	V and VI	Medical Boston University							6	St Surg	6	25706
	I	Surgical Tufts							6	St Surg	6	25708
	III	Surgical Boston University							6	St Surg	6	25703
	V	Surgical Harvard							6	St Ped	6	25701
		Straight Specialties Boston University							2	St Path		
		Pathology							6	St Ped	6	98734
Boston Floating	James M Baty	76	3 116	114	98			212 None	12	Rot	12	25811
Carney	Cornelius J Shea	282	11 333	368	184	12 322	164	150FM*	5	St Ped	5	25931
Children's Hospital Medical Center	R Cannon Ilev	249	9 919	423	352	86 901	165	FM	2	St Path	2	25936
									12	St Med	12	26132
Massachusetts General		812	25,434	1 193	872	225 256		66FM*	10	St Surg	10	26133
									6	St Ped	6	26134
									2	St Path		
Massachusetts Memorial	Philip D Bonnet	185	6,678	199	125	39 724	166	150FM	9	St Med	9	26232
									6	St Surg	6	26233
									1	St Path	1	26236
New England Center		170	5,872	111	88	20 673	167	220 None	13	St Med	13	26532
									6	St Surg	6	26533
New England	Louis Burke	83	4 034	60	35	10 937	168	150FM	6	Rot	6	26411
Peter Bent Brigham		220	6,745	445	318	6 664		250FM	10	St Med	10	26532
									6	St Surg	6	26533
St Elizabeth's	John P Rattigan	353	14 717	351	199	45 996		150FM	14	Rot	14	26611
BROCKTON												
Brockton	Daniel Rosen	202	9,477	284	118	34 989		250FM	6	Rot	6	26711
CAMBRIDGE												
Cambridge City	David Hurwitz	179	5 800	278	101	42,567		150FM	12	Rot	12	26811
Mount Auburn	Joseph Tartakoff	200	8 063	301	170	37 168		175FM	5	Mixed[1]	5	26939
									9	Rot	9	27011
FALL RIVER												
Truesdale	Robert H Moe	125	4 810	129	58	13 613	170	100FM	10	Rot	10	27111
Union	L V Ragsdale	140	5,203	175	40	4 829		100FM				
FRAMINGHAM												
Framingham Union	C G Tedeschi	155	8,154	135	83	7 029		200FM*	6	Rot	6	27311
HOLYOKE												
Holyoke	J J Bandeian	162	8,834	221	66	7 967		100FM	6	Rot	6	27411
Providence	Richard J Maher	147	6,274	172	48	6 112		200FM	6	Rot	6	81311
LAWRENCE												
Lawrence General	L S Jolliffe	200	9 046	255	192	6 134		100FM*	6	Rot	6	27511
LOWELL												
Lowell General	C J Shagoury	182	8,609	243	74	9 398		150FM*	4	Rot	4	27611
St John's	H S Glidden	154	8,427	193	106	10 032		150FM	6	Rot	6	27711
St Joseph's	L Peloquin	159	7,745	172	56	14 163		125FM	4	Rot	4	27811

Abbreviations and other references are listed on pages 656 and 657

Name of Hospital and Location	Program Director	Average Daily Census	Total Admissions	Total Number of Deaths	Autopsies	Outpatient Visits	Affiliated Services	Beginning Stipend (Month)	Authorized Complement	Type	Total Sought Through NIMP	NIMP Code
MASSACHUSETTS—Continued												
LYNN												
Lynn	F A Pirone	230	10 381	460	1 1	20 047		1[illegible]FM	10	Rot	10	2[illegible]811
MALDEN												
Malden	L C Thorp	181	8 416	234	97	12 104		160FM*	6	Rot	6	82711
METHUEN												
Bon Secours	M D Howard	128	6 9[illegible]	13[illegible]	41	2 7[illegible]3		160FM	6	Rot	6	82811
NEW BEDFORD												
St Luke s	J R Frothingham	20[illegible]	11 924	[illegible]	181	77 124		160FM	10	Rot	10	2[illegible]011
NEWTON												
Newton-Wellesley	N S Stearns	171	8 [illegible]40	207	111	6 440		10[illegible]FM	8	Rot	8	28011
PITTSFIELD												
Pittsfield Affiliated Hosps	C L Haidak								14	Rot	14	28111
Pitt field General	T C Clifford	13[illegible]	7 904	1[illegible]1	69	28 930		160FM				
St Luke s	C I Haidak	137	[illegible]122	18	6[illegible]	15 234	171	200FM				
QUINCY												
Quincy City	R C Fletcher	249	12 882	3[illegible]2	133	[illegible]		172FM	12	Rot	12	28311
SALEM												
Salem	S N Cardner	18[illegible]	8 299	981	98	28 314		160FM	6	Rot	6	28411
SPRINGFIELD												
Mercy	F J Ferrarone	258	11 311	410	1[illegible]2	15 271		200FM	8	Rot	8	28511
Springfield	H S M Uhl	3[illegible]0	12 223	512	258	12 494	172	180FM	1[illegible]	Rot	12	28611
Wesson Memorial		179	8 282	282	98	8 688	21[illegible]	160FM	6	Rot	6	28711
WALTHAM												
Waltham	Norman Stearns	114	[illegible]952	191	61	1,581	10[illegible]	200FM*	6	Rot	6	2[illegible]811
WORCESTER												
Memorial	J C Freymann	221	10 107	313	20[illegible]	22 41[illegible]		160FM*	11	Rot	11	2[illegible]011
St Vincent	J F Stapleton	508	16 606	488	229	31 642		1,0FM*	18	Rot	1[illegible]	29011
Worcester City	V P DiDomenico	2[illegible]9	10 [illegible]19	5[illegible]	281	31 329		200FM	12	Rot	12	29111
MICHIGAN—Hospitals 40 Internships, 617												
ANN ARBOR												
St Joseph Mercy	W E Brown III	333	17 64[illegible]	270	206	89 841		2,0FM*	16	Rot	16	29211
University	R B Nelson	82[illegible]	1[illegible]3[illegible]	601	444	247 724	173	14[illegible] None	44	Rot	44	29311
BATTLE CREEK												
Community	R E Fisher	149	9 8[illegible]6	146	6	24 811		300FM*	6	Rot	6	81411
Leila Y Post Montgomery	W D Walters	148	8 477	203	71	14 321		3,0FM*	6	Rot	6	29411
BENTON HARBOR												
Mercy	Frank Howard	117	6 246	10[illegible]	99	10 763		27[illegible]PM	6	Rot	6	90011
DEARBORN												
Oakwood	F W Durham	220	11 77[illegible]	278	1[illegible]8	23 192	174	200FM*	13	Rot	13	94611
DETROIT												
Detroit Memorial	C J France	2[illegible]0	11 7[illegible]	324	17[illegible]	[illegible]11	17[illegible]	400PM	13	Rot	13	29611
Evangelical Deaconess	Edwin J Neill	1[illegible]	[illegible]510	243	1[illegible]4	3 488		2,8PM*	8	Rot	8	29711
Grace	T J McBryan											
	G S Wilson	76[illegible]	27 466	733	378	2[illegible] 844	17	2,0FM	24	Rot	24	29811
Harper	H C Saltzstein	83[illegible]	21 94[illegible]	562	282	50 9[illegible]	17[illegible]	2,0PM*	28	Rot	28	29911
Henry Ford	R E Birk	821	27 177	86[illegible]	6[illegible]0	662 029		26[illegible]PM	26	Rot	26	30011
Mount Carmel Mercy	H L Morris	494	23 680	530	267	19 291		3[illegible]0PM	24	Rot	24	30211
Providence	D E Economy											
	R C Douglass	323	14 033	442	244	42 [illegible]39	170	400PM	12	Rot	12	30311
Receiving	J M Pierce Jr	64[illegible]	22 771	1 107	580	170 448	177	300PM	48	Rot	48	29611
St John	D F Van Hoek	2[illegible]	19 4[illegible]	321	1[illegible]4	2[illegible]48	178	300FM*	12	Rot	12	91511
St Joseph Mercy	Leonard Alexander	169	7 894	199	39	8 6[illegible]9	179	400FM	9	Rot	9	30411
Sinai	J E Berk	229	10 991	214	117	33 169	17[illegible]	2,0FM	1[illegible]	Rot	1[illegible]	92611
Woman s	R S McLaughey	297	13 181	226	113	[illegible]144	17[illegible]	4[illegible]0 None	16	Rot	16	30511
ELOISE												
Wayne County General Hospital and Infirmary	D B McDowell	4 247	10 883	1 210	487	48 9[illegible]0	177	317FM	36	Rot	2[illegible]	30611
FLINT												
Hurley	P E Schroeder	497	21 610	548	3[illegible]1	10 279		2,0FM	2[illegible]	Rot	2	30711
McLaren General		278	12 770	264	142	21 10[illegible]		300PM	12	Rot	12	86611
St Joseph	Lewis Simoni	3[illegible]0	17 238	374	183	1[illegible] 81	180	3,0PM	10	Rot	10	30811
GRAND RAPIDS												
Blodgett Memorial	D S MacIntyre	278	13 974	364	277	13 997		27 FM	16	Rot	16	30911
Butterworth	E E Schumacher											
	L H Birch	364	19 491	461	304	60 298		27[illegible]PM	10	Rot	10	31011
St Mary s	W C Baum	319	16 713	436	183	30,[illegible]46	181	27[illegible]FM	14	Rot	14	31111
GROSSE POINTE												
Bon Secours	E J Tamblyn	147	7 838	229	96	14 621	182	31[illegible]FM*	8	Rot	8	90611
HIGHLAND PARK												
Highland Park General	Howard Manz	262	11 803	312	131	6 477	178	300FM	14	Rot	14	31211
KALAMAZOO												
Borgess	Irvin J Marten	3[illegible]	10 112	319	161	5 732		2,0FM	8	Rot	8	31311
Bronson Methodist	F L Clement	216	12 [illegible]74	317	170	2[illegible] 881		280PM	6	Rot	6	31411
LANSING												
Edward W Sparrow	H J Schmidt	326	18 406	370	1[illegible]1	391	183	2,0FM	10	Rot	10	31511
St Lawrence	J C Neering	244	12 739	349	182	10 081		300FM*	12	Rot	12	31611
MIDLAND												
Midland	W H Cronemeyer	143	8,364	110	98	17 0[illegible]0		2,0FM	6	Rot	6	96111
MUSKEGON												
Hackley	W C White	184	9 177	26[illegible]	130	3[illegible] 243		3[illegible]0FM*	10	Rot	10	81511
PONTIAC												
Pontiac General	John J Marra	241	12 873	26[illegible]	192	20 070		32[illegible]FM*	19	Rot	19	31811
St Joseph Mercy	Julius Rutsky	306	16 111	249	219	8 906		27[illegible]FM*	12	Rot	12	31911
ROYAL OAK												
William Beaumont	Harold A Ott	243	13 39[illegible]	32[illegible]	178	4[illegible] 291	184	27[illegible]PM	12	Rot	12	9,811
SAGINAW												
Saginaw General	Thomas O Lohr	203	11 [illegible]61	266	161	10 216		3[illegible]PM	6	Rot	6	32011
St Luke s	J E Bratrud	190	9 [illegible]3	214	1[illegible]3	39,128		400PM	8	Rot	8	32111
St Mary s	W A DeYoung	146	7 928	201	8	10,378		3,0PM	6	Rot	6	32211
TRAVERSE CITY												
James Decker Munson	G E Stokes	16[illegible]	8 [illegible]7	144	84	19 0[illegible]2		27[illegible]PM	8	Rot	8	32311
MINNESOTA—Hospitals 15 Internships 254												
DULUTH												
St Luke s	M M Fifield	316	14 740	444	324	9 [illegible]39	18[illegible]	1,0FM	18	Rot	18	32411
St Mary s	A C Aufderheide	322	11 938	2[illegible]	179	7 368		1,0FM	12	Rot	12	32511
MINNEAPOLIS												
Methodist	J C Dahl	168	6 3[illegible]0	92	69	6 124		1,0FM*	12	Rot	12	86711
Minneapolis General	Thomas Lowry	319	8 040	6[illegible]	382	86 706		[illegible]FM	39	Rot	39	32911

Abbreviations and other references are listed on pages 656 and 657

Name of Hospital and Location	Program Director	Average Daily Census	Total Admissions	Total Number of Deaths	Autopsies	Outpatient Visits	Affiliated Services	Beginning Stipend (Month)	Authorized Complement	Type	Total Sought Through NIMP	NIMP Code
MINNESOTA—Continued												
Mount Sinai	M E Goldberg	170	9 751	204	184	11 294		150FM	14	Rot	14	86811
Northwestern	F H Lott	250	13 825	245	203	11 085		175FM	12	Rot	12	33011
									1	St Med	1	33032
									1	St Surg	1	33033
									1	St Ped	1	33034
St Barnabas Swedish	Lyle J Hay								24	Rot	24	33111
St Barnabas	Lyle J Hay	201	15 056	282	203	9 264		150FM				
Swedish	Lyle J Hay	430	22 015	454	214	9 351	186	150FM				
St Mary's	John Twomey	357	17 228	336	197	15 800		200FM	12	Rot	12	33111
University of Minnesota Hospitals		361	16 322	852	738	131 293	187	80FM	12	St Med	12	33112
									15	St Surg	15	33113
									13	St Ped	8	33134
SAINT PAUL												
Ancker	T J Broadie	455	8 966	733	442	104 694		100FM	26	Rot	26	33011
Bethesda Lutheran	R G B Bjornson	178	11 640	237	109	10 412	188	200FM	8	Rot	8	33011
Charles T Miller	F J Milnar	352	13 094	296	176	48 393	189	200FM	14	Rot	14	33011
St Joseph's	J H Kelly	251	11 154	256	122	10 248		300PM	14	Rot	14	33011
St Luke's	R J Lindell	196	7 853	166	71	5 367	190	150FM	6	Rot	6	33011
MISSISSIPPI—Hospitals, 2, Internships, 35												
JACKSON												
Mississippi Baptist	Carl D Brannan	269	17 546	282	78	12 451		250PM	12	Rot	12	34011
University	Warren B Bell	236	9 946	485	306	51 409		200 None	23	Rot	23	95711
MISSOURI—Hospitals, 24, Internships, 424												
CLAYTON												
St Louis County	K B Coldwater	125	5 479	373	226	28 522		175FM	10	Rot	10	34211
COLUMBIA												
University of Missouri Medical Center	V J Wilson	192	4 824	249	175	31 250		150 None	2	St Ped	2	99434
									4	St Path	4	99436
KANSAS CITY												
Children's Mercy	Herbert C Miller	90	2 924	72	50	44 508	191	175FM	3	St Ped	3	98834
Kansas City General	G J Miller	326	11 098	851	439	93 456		170FM*	30	Rot	30	34311
Menorah Medical Center	M C Creditor	299	11 850	216	173	23 598	192	250FM	14	Rot	14	34511
Research	H W Benoit Jr	210	7 438	238	154	27 986	193	250FM*	10	Rot	10	34611
St Joseph	J V Mantz Jr	288	12 764	253	134	17 949		200FM	12	Rot	12	34711
St Luke's	D M Gibson	395	15,474	413	252	16 393	192	225FM*	18	Rot	18	34811
St Mary's	J R Moriarty	297	13 685	290	157	33 796	192	300PM	12	Rot	12	34911
Trinity Lutheran	H H Shuey	175	8 606	234	137	5 141	192	200FM	8	Rot	8	35011
ST JOSEPH												
Missouri Methodist	J R McDaniel	193	9 754	383	107	4 338		175FM	4	Rot	4	35111
St Joseph's	Lawrence H Pifer	130	6 582	194	67	3 268		200FM	4	Rot	4	35211
ST LOUIS												
Barnes		747	26 609	665	506	123 897	194	55FM	10	St Med Wd	10	35312
									15	St Med Pvt	15	35317
									12	St Surg	12	35333
									4	St Path	4	35334
									4	St Ob Gyn	4	35335
Deaconess	Cesar A Gomez	271	9 121	315	131	20 441	202	150FM	12	Rot	12	35611
De Paul	P J Bettonville	342	13 789	454	185	11 631		150FM	12	Rot	12	35511
Homer G Phillips	W H Sinkler	487	16 429	801	387	104 214		193PM	40	Rot	40	35711
Jewish	A B Eisenstein	409	13 262	492	244	20 367	195	175FM	14	Rot	14	35811
									4	Mixed[1]	4	35820
Lutheran	F W Klingt	241	10 906	393	158	8 563		150FM	12	Mixed[1]	12	35920
Missouri Baptist	A R Dolton	337	12 429	350	132	6 144		200FM	16	Rot	16	36011
St John's	W J Kistner J G Leahy	307	11 997	424	221	27 038	194	150FM	14	Rot	14	36211
St Louis Children's	A F Hartmann Jr	129	4 906	156	143	41 820	196	55FM	8	St Ped	8	86934
St Louis City	J V Mulligan	707	20 745	1 159	480	102 241		192PM	46	Rot	46	36311
									8	St Med (Unit I)	8	36312
									8	St Med (Unit II)	8	36394
									2	St Surg (Unit I)	2	36333
									2	St Surg (Unit II)	2	36397
									4	St Ped	4	36331
St Luke's	P O Hagemann	267	12 067	333	214	20 679	195	200FM	12	Rot	12	36411
St Mary's Group of Hospitals of St Louis University	J W Colbert, Jr	773	28 231	701	458	121 645	194	175FM*	12	Rot	12	36511
									8	St Med	8	36512
									8	St Surg	8	36533
									6	St Ped	6	36534
MONTANA—Hospitals, 1, Internships, 4												
BUTTE												
St James	F W Saam	127	6 284	164	66	18 574		150FM	4	Rot[0]		
NEBRASKA—Hospitals, 10, Internships, 91												
LINCOLN												
Bryan Memorial	L F Pfeiffer	112	5 724	153	83	7 200		300FM	4	Rot	4	96811
Lincoln General	D F Purvis	130	6 398	158	81	3,289		300FM	4	Rot	4	36911
St Elizabeth	Francis Neumayer	198	10 822	345	107	10 168		300FM	6	Rot	6	37011
OMAHA												
Bishop Clarkson Memorial	W D Angle	215	11 847	230	126	15 965	197	150FM	12	Rot	12	37111
Children's Memorial	Carol R Angle	58	4 238	64	52	5 264		225PM*	4	St Ped	4	81051
Creighton Memorial St Joseph	J R Walsh	472	17 996	460	186	9 410	198	185FM*	18	Rot	18	37211
Immanuel	Edward Langdon	99	5 771	190	79	12 215	199	270PM	10	Rot	10	37311
Nebraska Methodist	J R Schenken	179	9,753	244	198	5 567	199	300 None	11	Rot	11	37411
St Catherine's	C S Moran	170	9 024	205	125	3 421		300PM	8	Rot	8	37511
University of Nebraska	John Barmore	122	4 087	147	119	46 466	198	200PM	14	Rot	14	37611
NEW HAMPSHIRE—Hospitals, 1, Internships, 16												
HANOVER												
Mary Hitchcock Memorial	Joshua Burnett	231	8,668	279	226	66 973		135PM	16	Rot	16	3811

Abbreviations and other references are listed on pages 656 and 657

Name of Hospital and Location	Program Director	Average Daily Census	Total Admissions	Total Number of Deaths	Autopsies	Outpatient Visits	Affiliated Services	Beginning Stipend (Month)	Authorized Complement	Type	Total Sought Through NIMP	NIMP Code
NEW JERSEY—Hospitals 42 Internships, 519												
ATLANTIC CITY												
Atlantic City	J C Stella	192	10 780	342	241	3[illegible]1 8	200	200FM	12	Rot	12	37811
BAYONNE												
Bayonne Hospital and Dispensary	F L Boyle	175	7 185	249	63	5 667		1[illegible]5FM	10	Rot	10	37911
CAMDEN												
Cooper	Benjamin F Lee	437	19 285	629	302	3[illegible] 948		200FM*	18	Rot	18	38011
Our Lady of Lourdes	W A Halbeisen	289	10 768	254	142	39 692		225FM*	10	Rot	10	93311
West Jersey	David Keyser	232	9 316	243	97	7 616		200FM*	12	Rot	12	38111
EAST ORANGE												
East Orange General	Albert Grunberg	138	6 424	249	107	17 618		150FM	[illegible]	Rot	5	38211
ELIZABETH												
Alexian Brothers		133	4 770	359	80	10 095	201	100FM	12	Rot	8	87111
Elizabeth General Hospital and Dispensary	F C Pascrchia	235	13 302	327	106	23 982		150FM	12	Rot	12	38411
St Elizabeth	Charles R Ream	199	9 969	318	114	[illegible]3,9		200FM	14	Rot	14	38511
ENGLEWOOD												
Englewood	Carl Wierum	221	10 620	233	130	22 989		150FM*	8	Rot	8	38611
HACKENSACK												
Hackensack	Otto S Hensle W R Thompson	287	14 353	417	171	40 591		125FM	12	Rot	12	38711
HOBOKEN												
St Mary	Arthur Lewis	282	9 310	418	130	18 611		100FM	15	Rot	15	38811
JERSEY CITY												
Christ	O Musterman	289	10 956	395	134	11 699		125FM	12	Rot	12	38911
Jersey City	Louis L Perkel	792	17 524	1 358	425	83 141	203	83FM	34	Rot	34	39011
									15	St Med	15	39032
									8	St Surg	8	39033
									2	St Ped	2	39034
									1	St Path	1	39036
St Francis	H D Chieffo	139	5 383	103	41	7 385	203	100FM	10	Rot	10	39111
LONG BRANCH												
Monmouth Medical Center	W G Herrman	306	1 012	223	120	9 876		150FM	12	Rot	10	39211
MONTCLAIR												
Mountainside	R F Healey	269	10 406	310	187	13 315		200FM*	14	Rot	14	39311
MORRISTOWN												
All Souls	S Giordano	108	4 429	150	63	13 172	204	100FM*	3	Rot	3	90711
Morristown Memorial	J C Stockman R W Smith	326	12 013	323	214	20 233		200FM	11	Rot	8	39411
NEPTUNE												
Fitkin Memorial	Samuel H Rubin	227	13 051	493	208	24 001		200FM	10	Rot	10	39511
NEWARK												
Harrison S Martland Medical Center	Joseph H Fobes	529	17 795	1 281	394	7 709		112FM	30	Rot	30	39811
Newark Beth Israel	F B Cohen	385	18 375	484	253	29 253		100FM	13	Rot	13	39711
United Hospitals of Newark Presbyterian Unit	J J McGuire	306	12 806	442	152	30 749	205	150FM*	10	Rot	3	87211
St Barnabas Medical Center	Abdol H Islami	181	7 908	204	64	22 315		150FM	8	Rot	8	39611
St Michael's	John J Butler	282	15 076	391	180	22 278		140FM	15	Rot	15	39911
NEW BRUNSWICK												
Middlesex General	Norman Rosenberg	191	9 902	240	121	31 190	206	200FM	10	Rot	10	97911
St Peter's General	C J Aitken Jr	252	15 428	278	110	21 443		175FM	10	Rot	10	40011
ORANGE												
Orange Memorial	F P O Sullivan	273	10 989	458	197	50 465		200FM	10	Rot	10	40111
PARAMUS												
Bergen Pines County	Carl Wierum	511	5 685	943	343	38,800	207	100FM	20	Rot	20	90811
PASSAIC												
Passaic General	J Reuben Budd	204	9 444	386	157	26 008		100FM*	6	Rot	6	40211
St Mary's	Robert Brill	159	7 411	272	111	6 115		100FM	6	Rot	6	40311
PATERSON												
Barnert Memorial	Israel Wolf	128	7 008	199	88	17 823		160PM	6	Rot	6	40411
Paterson General	J B Mearns	245	13 973	350	171	15 873		100FM	12	Rot	12	40511
St Joseph	J J Jennings	380	15 174	397	298	12 952		150FM*	12	Rot	12	40611
PERTH AMBOY												
Perth Amboy General	C J Kohut	365	18 591	410	138	3 942		115FM	14	Rot	14	87311
PLAINFIELD												
Muhlenberg	E W Barnes Jr	369	20 085	519	191	21 838		200FM*	12	Rot	12	40711
SOMERVILLE												
Somerset	M E Tolomeo	203	11 379	294	136	3 544		200FM	8	Rot	8	93411
SUMMIT												
Overlook	Evelyn Holt	918	10 633	319	161	19 496		150FM	12	Rot	12	40811
TEANECK												
Holy Name	J F Flynn	195	12 459	260	73	10 545		220FM	8	Rot	8	40911
TRENTON												
Helene Fuld	S B Apple	156	8 319	247	100	5 957		250FM*	6	Rot	6	41211
Mercer	R A McCormack	246	11 673	330	209	7 944		150FM	9	Rot	9	41011
St Francis	Albert Carabelli	272	12 341	489	311	30 930		150FM	10	Rot	10	41111
NEW MEXICO—Hospitals 1 Internships 12												
ALBUQUERQUE												
Bernalillo County-Indian	M Brown	174	5 625	178	84	41 161		250FM*	12	Rot	12	90211
NEW YORK—Hospitals 105 Internships 1 924												
ALBANY												
Albany	Ferdinand Hause Jr	591	24 168	745	502	29 807		185PM	19	Rot	19	41411
									6	St Med	6	41422
									11	St Surg	11	41433
Memorial	Gerard Barnaby	167	6 815	169	70	5 002		175FM	14	Rot	14	41511
St Peter's		255	9 329	318	146	25 679	208	200FM	12	Rot	12	41611
BINGHAMTON												
Binghamton General	J K Moyer	258	12 077	416	167	4 841		125PM	15	Rot	15	41811
BRONXVILLE												
Lawrence	Hiram P Salter	187	7 652	228	100	21 102		200FM	8	Rot	8	91611
BUFFALO												
Allied Hospitals of the Sisters of Charity (Sisters of Charity and Emergency Hospitals)	Charles E Wiles	372	15 780	515	198	30 442	[illegible]	32[illegible]FM*	12	Rot	12	44111

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NEW YORK—Continued												
Buffalo General	T T Jacobs	562	18 036	664	367	33 231	209	150FM*	23	Rot	23	43611
									3	St Med	3	43639
Children's	Donald Dunphy	221	14,416	225	199	65 933		100FM	4	St Ped	4	96531
Deaconess	I I Berman	243	10,219	351	152	27,872	209	300FM	14	Rot	14	43611
Edward J Meyer Memorial	F A Paolini	801	12 638	995	476	138 302		273PM	26	Rot	26	43811
Mercy	J J O Brien	326	13 169	432	206	44 010	210	200FM*	19	Rot	19	43911
Millard Fillmore	J H Golden	455	18 723	549	297	42 023	209	273PM	15	Rot	15	44011
COOPERSTOWN												
Mary Imogene Bassett	James Bordley III	76	3 200	107	78	36 732		150PM	9	Rot	9	44211
									1	St Med	1	44239
ELMIRA												
Arnot Ogden Memorial	C E Linway	169	9 197	225	84	25 679		200FM	4	Rot	4	44311
St Joseph's	R H Huddle	179	8 703	286	97	26 819		300PM	5	Rot	5	44411
GLEN COVE												
Community	H Mayberger	161	11 492	247	115	30 961		200FM	8	Rot	8	44611
GLENS FALLS												
Glens Falls	W G Illinger	236	14 983	367	155	10 730		200FM*	9	Rot	9	44711
HEMPSTEAD												
Meadowbrook	I B Champlin	582	18 341	1 450	579	27 879		200FM	32	Rot	32	44811
JOHNSON CITY												
Charles S Wilson Memorial	Dean D Smith	353	15 189	401	139	77 928		200PM	12	Rot	12	45211
KENMORE												
Kenmore Mercy	J M Donohue	300	6 962	70	36	13,294		245FM	12	Rot	12	85911
MINEOLA												
Nassau	L R Ferraro	267	14 629	347	148	17 643		250 None	8	Rot	8	45511
MOUNT KISCO												
Northern Westchester	J J Gallagher	128	6 711	178	58	30 344		100FM	4	Rot	4	45611
MOUNT VERNON												
Mount Vernon	F T Rogliano	250	9 333	330	163	11 557		100FM	12	Rot	12	45711
NEWBURGH												
St Luke's	Orin Wahl	173	8 332	343	116	41 078		200FM	8	Rot	8	45811
NEW ROCHELLE												
New Rochelle	H J Dunlap	262	13 559	400	157	9 948		200FM*	12	Rot	12	45911
NEW YORK CITY												
Bellevue Hospital Center		2,271	46,712	1,838	771	442 021		125FM				
First Medical Div								125FM	12	Mixed [1]	12	46070
Columbia University	D W Richards											
First Surgical Div							289	125FM	4	Rot	4	46111
Columbia University	K M Lewis								2	St Surg	2	46133
Second Medical Div								125FM	3	Mixed [1]	3	46070
Cornell University	Thomas P Almy								21	St Med	21	46339
Second Surgical Div								125FM	7	St Surg	7	46353
Cornell University	C W Holman											
Third and Fourth Medical Divisions								125FM	27	St Med	27	46432
New York University College of Medicine	Lewis Thomas											
Third Surgical Div								125FM	10	St Surg	10	46533
New York University College of Medicine	J H Mulholland											
Third Division Department of Pathology								125FM	1	St Path	1	93036
New York Univ College of Medicine	Marvin Kuschner											
Third Division Department of Pediatrics								125FM	10	St Ped	10	92934
New York University College of Medicine	I E Holt Jr											
Fourth Surgical Division								125FM	8	St Surg	8	46733
New York University Post Graduate Medical School	L R Slattery							125FM	26	Rot	18	41911
	Isadore Snapper	293	10 604	357	168	41 199		140PM	20	Rot	20	47011
Beth El Hospital		295	9 437	300	120	39 882		175FM	6	Rot [9]		
Beth Israel	S J Deckoff	155	7 067	225	110	2,113		125FM	9	Rot	9	47111
Booth Memorial	E E Fischel	260	8 927	529	122	54 694		175SM	16	St Med	16	93139
Bronx	I H Scheinberg	935	13 198	945	543	190 872			12	St Surg	12	93133
Bronx Municipal Hospital Center									12	St Ped [7]	12	93168
									2	St Ped	2	93134
								160FM	16	Rot	16	12011
	Paul D Arpin	304	12 185	345	158	66 366		125FM	34	Rot	34	49111
Brooklyn	David N Marks	676	12 287	1,138	503	85,962			2	St Surg	2	49133
City Hospital at Elmhurst							211	100FM	14	Rot [9]		
	M R Brazzini	244	8 250	353	109	30 271		125FM	40	Rot	40	42211
Columbus	A A Kane	402	10 162	999	311	64 755		125FM	9	Rot	9	42311
Coney Island	James Tesler	269	9 017	556	145	101 969			2	St Surg	2	42433
Cumberland									2	St Ped	2	42334
								175FM	12	Rot	12	44511
		264	13 108	316	155	32,903	212	125FM	19	Rot	19	47411
Flushing Hospital and Dispensary	C N Baker	361	8 958	709	261	85,172	213	85FM	10	Rot	10	47511
Fordham	C J Scala	171	5,986	179	62	25 255	214	100FM	15	Rot	15	46911
French	Jack Harnes	144	5 296	205	91	12 594		175FM	12	Rot	12	42411
Grand Central	L Burness	240	6 343	336	150	109,202		125FM	49	Rot	49	47511
Greenpoint	M Lefkowitz	692	18,360	1,367	496	261 216	215	85FM	6	Rot	6	47911
Harlem	S K Fineberg	271	6,387	132	56	54,094						
Hospital for Joint Diseases	A M Betcher							125FM	10	Rot	10	44911
Jamaica	Arnold Stanton	240	9,715	293	121	26,075		65FM	34	Rot	34	42511
Jewish	S Olshin	414	19,706	549	273	88 657			4	St Med	4	42532
	Jacob Goldstein								2	St Ped	2	42534
								100FM	12	Rot	12	48011
		152	6,070	275	89	19,999		125FM	48	Rot	48	42611
Jewish Memorial	Alfred Schwarz	2,072	59 438	3,725	1 032	345 362			48	Mixed [1 2]	48	47070
Kings County Hospital Center	Joseph Benton								22	St Med	22	47639
									12	St Surg	12	47633
									8	St Ped	8	42631
									3	St Path	3	42636
									6	Rot	6	48111
		188	4,909	185	123	15 836	216	170PM	3	St Med	3	48139
Knickerbocker	M S Bruno								3	St Surg	3	48133

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NEW YORK—Continued												
Lebanon	Philip Kraimin	227	8 191	337	168	26 627		75FM	13	Rot	13	48211
									1	St Surg	1	48233
Lenox Hill	F H Ghielin	348	12 718	356	144	56 068	217	125PM	23	Rot	23	48311
Lincoln		309	13 082	793	294	137 215		125FM	18	Rot	18	48411
Long Island College	John N Edson	357	12,234	460	192	42 502		140PM	8	Rot	8	42711
									8	Mixed[1]	8	42720
									4	St Med	4	42732
									2	St Surg	2	42733
									2	St Ped	2	42734
Long Island Jewish	P E Lear	228	10 080	319	225	20 803		75FM	14	Rot	14	96311
Lutheran	F B MacNaughton	113	6 038	132	47	13 909		200FM	8	Rot	8	97211
Lutheran Medical Center	C F Cucolo	173	6 853	199	98	10 004		110FM	11	Rot	11	43011
Maimonide	David Grob	452	15 325	668	262	54 783		135PM	12	Rot	12	42811
									10	Mixed[1]	10	42820
									8	St Med	8	42832
Mary Immaculate	R N Monaco	228	9 638	339	124	44 472		160FM	8	Rot	8	46011
Methodist	R V Mansell	305	11 034	311	131	28 838		150FM	10	Rot	10	42911
									4	St Med	4	42932
									1	St Surg	1	42933
									1	St Ped	1	42934
Mi ericordia	Justin C Walker	182	5 234	160	105	12 387		125FM	12	Rot	12	48611
Montefiore	Tiffany Lawyer	602	9 965	934	431	29 361		137FM	36	Mixed[1]	36	48720
Morrisania City	Harris Blinder	356	10 009	783	247	89 439		125FM	18	Rot	18	48811
Mother Cabrini Memorial	A Privitera	120	4 148	99	31	6 889		100PM	8	Rot	8	48911
Mount Sinai	A F Guttmacher	827	25 053	895	480	265 180		50FM	36	Rot	36	49011
New York		969	31 927	727	503	215 249		143PM	18	St Med	18	49232
									17	St Surg	17	49233
									3	St Ped	3	49234
									3	St Path	3	49236
New York Infirmary		128	4 927	103	47	33 321		100FM	7	Rot[9]		
New York Polyclinic Medical School and Hospital	A I Lichtman	255	9 683	260	104	72 686		125FM	12	Rot	12	49411
Presbyterian		1 266	38 808	942	639	403 361		205	12	St Med	12	49532
									12	St Surg	12	49533
									3	St Path	3	49536
Prospect Height	I I Cabelli	122	5 703	166	40	1 167		200PM	6	Rot	6	87411
Queens Hospital Center	I I Morse	1 127	14 850	1 701	652	111 059		125FM	34	Rot	34	43111
Roosevelt		363	10 534	368	180	94 038		133PM	8	Mixed[1]	8	49623
									7	Mixed[7]	7	49632
St Catherine s	W H De Strange	213	8 402	307	124	15 043		125FM	10	Rot	10	43111
St Clare	V L Madden	338	9 976	335	163	49 546		160PM	13	Rot	13	49711
									1	St Med	1	49732
									2	St Surg	2	49733
St Francis	J V Cazzola	288	9 644	352	132	33 873	244	100FM	12	Rot	12	49811
St John s Episcopal	J A McCormick	203	8 249	239	81	50 093		160FM	12	Rot	12	43211
St John Long Island City	A F Pavera	158	5 228	234	87	76 225	218	125FM	16	Rot	16	43411
St Luke s		455	11 394	373	229	119,860		75FM	17	Mixed[1 2]	17	49920
									4	St Ped	4	49934
St Mary s	M I Salica	156	5 808	185	64	20 141		125FM	8	Rot	8	43311
St Vincent S I	Lina R Merlino	239	10 727	340	128	20 135		190PM	8	Rot	8	51411
St Vincent N Y C		702	18,374	917	470	91 149	217	130FM	23	Rot	23	50011
									5	St Med	5	50032
									6	St Surg	6	50033
Staten Island	Marie C Rosati	181	11,305	287	112	7 452		160FM	8	Rot	8	51511
Sydenham	David N Roginsky	181	6 764	114	35	33 716		125FM	9	Rot	9	50111
Unity	Victor Cinsberg	151	6 907	266	67	26 670		125FM	8	Rot	8	43411
Wyckoff Height		227	9 331						8	Rot	8	43511
NIAGARA FALLS												
Mount St Mary s	F J Palumbo	39	6 230	172	77	17 162		250FM*	6	Rot	6	50311
Niagara Falls Memorial	I B Kramer	205	11 818	344	205	23 156		260PM	13	Rot	13	93511
PORT CHESTER												
United	I I Delaney	208	9 117	272	97	20 043		235PM	8	Rot	8	50411
POUGHKEEPSIE												
St Francis	I D Cioia	169	9 358	201	76			200FM	6	Rot	6	50511
Vassar Brothers	W Updegraff	192	8 917	314	106	18 743		200FM	8	Rot	8	50611
ROCHESTER												
Genesee	Harry I Segal											
	F W Anderson	243	11 839	355	287	15 495	220	150FM*	4	Rot	4	50711
									4	Mixed[1]	4	50720
									4	St Med	4	50732
									4	St Surg	4	50733
									1	St Path	1	50736
Highland	J W Holler	198	9 223	272	214	10 527	290	150FM*	9	Rot	9	50811
									2	St Med	2	50832
									3	St Surg	3	50833
Rochester General	P W Weld	350	19 075	470	300	14,521		150FM*	18	Rot	18	50911
									2	St Med	2	50932
									2	St Surg	2	50933
St Mary s	T M Cocke	267	13 147	469	254	23 498		225PM	15	Rot	15	51011
Strong Mem Rochester Municipal	J M Anderson	541	18 590	776	575	83 920	221	125 None	8	Mixed[1 7]	8	51120
									17	St Med	17	51132
									12	St Surg	12	51133
									10	St Ped	10	51134
									4	St Path	4	51136
									4	St Ob Gyn	4	51135
SCHENECTADY												
Ellis	C D Mahides	383	16 658	390	257	4 719		300FM	18	Rot	18	51211
St Clare s	M B Rodney	160	7 416	269	108	15 611		150FM*	12	Rot	12	1311
SYRACUSE												
General	Ferdinand Geiger	97	5 836	146	47	2 151		191 None	6	Mixed[1-2 3]	6	51720
St Joseph s	B Levinson	249	12 878	366	160	34,305		225PM	8	Rot	8	51811
									4	Mixed[1]	4	51820
State Univ of New York Upstate Medical Center (Univ Hosp of the Good Shepherd Syracuse Memorial Crouse Irving Veterans Admin City Hosp Communicable Diseases Syracuse Psychiatric St Joseph s Syracuse Dispensary)	Wm A Harris	1 379	50 163	1 404	750	124,345		208 None	12	Rot	12	51611
									6	Mixed[1]	6	51620
									8	St Med	8	51632
									7	St Surg	7	51633
									5	St Ped	5	51634
									2	St Path		

Abbreviations and other references are listed on pages 656 and 657

Name of Hospital and Location	Program Director	Average Daily Census	Total Admissions	Total Number of Deaths	Autopsies	Outpatient Visits	Affiliated Services	Beginning Stipend (Month)	Authorized Complement	Type	Total Sought Through NIMP	NIMP Code
NEW YORK—Continued												
TROY												
Leonard	M W Quandt	151	8 261	248	78	10 486	222	150FM	8	Rot	8	96911
St Mary's	W A Griesau	148	6 328	217	78	13 771		175FM	6	Rot	6	51911
Samaritan	C G Burn	162	8 185	254	143	28 122		250FM*	10	Rot	10	52011
VALHALLA												
Grasslands	K W Trout	340	5 120	420	244	66 642		150FM	20	Mixed [1-2]	20	52190
WHITE PLAINS												
White Plains	J R Meharg	160	7 504	267	110	22 662		150FM	8	Rot	8	59311
YONKERS												
St John's Riverside	Jacque Miller	181	8 352	267	74	23 414		120FM	9	Rot	9	52411
St Joseph's	A G Barraco	126	4 673	173	76	11 972		100FM	8	Rot	8	52511
Yonkers General	M J Eisen	129	6 076	157	54	6 430		100FM*	7	Rot	7	59611
NORTH CAROLINA—Hospitals, 10, Internships, 205												
ASHEVILLE												
Memorial Mission	R Y Moon	254	12 915	379	97	39 030		250PM*	8	Rot	8	94911
CHAPEL HILL												
North Carolina Memorial	R R Cadmus	264	9 220	368	302	91 779		150 None	8	Mixed [1]	8	90020
									12	St Med	12	90032
									8	St Surg	8	90033
									4	St Ped	4	90034
									4	St Path	4	90036
DURHAM												
Duke		474	18 867	577	375	101 054	223	251 M*	1	Mixed [3]	4	52970
									24	St Med	24	52932
									16	St Surg	16	52933
									10	St Ped	10	52934
									3	St Path	3	52936
									1	St Ob Gyn	1	52935
Watts	Jack Hughes	226	11 467	223	89	51 956		250FM	13	Rot	13	87711
									3	Mixed [1-3]	3	87720
									2	St Med	2	87732
									2	St Surg	2	87733
									1	St Ped	1	87734
									1	St OB Gyn	1	87735
GREENSBORO												
Moses H Cone Memorial	J I Brantley	239	13 008	301	184	20 270		300PM	16	Rot	16	94311
RALEIGH												
Rex	T B Dameron Jr	301	16 274	340	125	51 741		225FM*	12	Rot [9]		
WILMINGTON												
James Walker Memorial	J J Marshburn	203	12 131	242	72	21 699		275FM*	8	Rot [9]		
WINSTON-SALEM												
City Memorial		270	14 690	317	141	17 538		262PM	14	Rot	14	53511
Kate Bitting Reynolds Memorial		144	6 612	313	68	18 428		262PM	9	Rot	9	53611
North Carolina Baptist	R I Smith	355	17 017	481	289	63 158		166PM	2	Mixed [1]	2	53720
									8	St Med	8	53732
									6	St Surg	6	53733
									3	St Ped	3	53734
									3	St Path	3	53736
NORTH DAKOTA—Hospitals, 2, Internships, 14												
FARGO												
St John's	Jack J Spier	128	6 238	161	83	5 408		225FM	6	Rot	6	87011
St Luke's	C H Hall	116	7 530	202	105	7,743		225FM	8	Rot	8	53911
OHIO—Hospitals, 53 Internships, 833												
AKRON												
Akron City	J R Kelly	516	21 329	749	408	15 359	224	225FM*	24	Rot	24	54111
Akron General	C J Miller	40	15 351	156	258	51 849	224	250FM*	20	Rot	20	54211
St Thomas	R H Hart	232	9 965	364	201	35 125	224	200FM*	15	Rot	15	54311
BARBERTON												
Barberton Citizens	J F Morris	208	10 213	254	109	9 123		225FM*	12	Rot	12	96411
CANTON												
Aultman	C V Smith	456	21 395	526	208	4 820		250PM	20	Rot	20	54411
Mercy	R S Rosedal	427	16 579	485	215	27 898		250PM	12	Rot	12	54511
CINCINNATI												
Bethesda	G De Brosse	237	10 274	270	142	16 370	225	210PM	6	Rot	6	54611
									6	Mixed [3]	6	54620
Christ	G J Brown	336	12 108	454	207	37 861	225	175FM*	18	Rot	18	54711
									3	St Surg	3	54733
Univ of Cincinnati Hosp Group												
Cincinnati General	C J Kiely Jr	559	16 529	1 209	776	206 625	226	100FM	52	Rot	52	54811
Good Samaritan	D C Fischer	541	21 875	509	266	27 659		200FM	15	Rot	15	55011
									4	St Surg	4	55023
Jewish	J G Margolin	382	16 960	467	250	47 076		175FM	16	Rot	16	55111
St Mary's	J M Schuster Jr	145	5 758	227	49	29 705		225FM	12	Rot	12	55211
CLEVELAND												
Cleveland Clinic	C J Leedham	420	15 485	549	314	248 365	227	100FM	12	Rot	12	96811
									4	St Surg	4	96833
Cleveland Metropolitan General	Marian J Holl	588	10 685	545	348	161 684		125FM	16	Rot	16	55311
									4	St Med	4	55322
									4	St Surg	4	55333
									4	St Ped	4	55334
Evangelical Deaconess	Robert A George	201	12 203	370	166	16 182	228	100FM	12	Rot	12	90911
	Milton J Sadlon	279	16,425	387	165	5 549		200FM	15	Rot	15	56411
Fairview Park	G Seltzer	352	14 042	456	252	10 086		200FM*	12	Rot	12	57111
Huron Road	J M Govette	169	8,895	205	102	27 808		225PM	12	Rot	12	56611
Lutheran	Jean A Groh	309	12 569	509	248	48 030		180FM	22	Rot	22	56711
Mount Sinai	Henry Hoffman	292	11,960	424	166	31 243		200FM	8	Rot	8	56811
St Alexis	W P Shelly	272	11,326	267	88	36 396		200FM	7	Rot	7	56911
St John's	P J Corrigan	427	18 210	537	328	114 197		180FM	24	Rot	24	56011
St Luke's	R G Hodges	823	10 297	395	193	50 593	220	200FM*	15	Rot	15	56111
St Vincent Charity	Arthur C Corcoran											

* Abbreviations and other references are listed on pages 656 and 657

Name of Hospital and Location	Program Director	Average Daily Census	Total Admissions	Total Number of Deaths	Autopsies	Outpatient Visits	Affiliated Services	Beginning Stipend (Month)	Authorized Complement	Type	Total Sought Through NIMP	NIMP Code
OHIO—Continued												
University Hospital		685	27 984	781	544	153 173		125PM	16	Rot	16	56211
									12	St Med	12	56232
									9	St Surg	9	56233
									6	St Ped	6	56234
									2	St Path		
CLEVELAND HEIGHTS												
Doctors	R R Renner	174	6 256	186	74			100FM	8	Rot	8	56311
COLUMBUS												
Grant	F H Herrington	221	10 400	333	99	13 106	230	275FM*	12	Rot	12	56411
Mount Carmel	R Zollinger	370	17 083	42	256	41 135	230	250FM*	18	Rot	18	56511
University Hospital	C A Donn	406	20 [illegible]	806	574	127 790	251	175PM	24	Rot	24	56611
									12	St Med	12	56632
									1	St Surg	12	56633
White Cross	E P Kintz	110	15 104	310	221	18 093	252	275PM*	18	Rot	18	56711
DAYTON												
Good Samaritan	E A Serlin	133	18 716	415	215	14 684		225FM	10	Rot	10	6811
Miami Valley	C R Brown Jr	963	28 691	843	402	18 679		200FM	16	Rot	16	56911
St Elizabeth	J S Surdyk	587	20 [illegible]	10	227	21 355		250FM	16	Rot	12	57011
ELYRIA												
Elyria Memorial	H F McDonald	180	9 117	235	92	28 303		200FM	5	Rot	5	90111
EUCLID												
Euclid Glenville	E I Whittaker	181	10 [illegible]	242	103			125FM	10	Rot	10	[illegible]11
GARFIELD HEIGHTS												
Marymount	W F Kulicek	116	4	802	108	20 [illegible]	3	200FM*	12	Rot	12	57211
HAMILTON												
Mercy	C A Schuck	285	12 [illegible]	68	114	44 102	234	150FM	12	Rot	12	57311
LAKEWOOD												
Lakewood	H E Yoder	299	10 [illegible]	218	125	21 530		175FM*	6	Rot	6	57411
LIMA												
Lima Memorial	R H Lowe	40	12 204	4	132	13 068		200FM	12	Rot	12	57511
St Rita's	A F Portmann	247	15 383	97	180	51 908	235	350PM	12	Rot	12	57611
LORAIN												
St Joseph	M C Kolczun	182	4 [illegible]	250	104	36 043	256	250FM	6	Rot	6	97311
SPRINGFIELD												
Mercy	V E Anton	251	10 [illegible]	214	145	30 020		250PM	9	Rot	9	87811
Springfield City	John Harley	285	10 747	329	139	47 618		325FM	10	Rot	10	57711
STEUBENVILLE												
Ohio Valley	John V Bevan	104	10 [illegible]	352	111	12 265		225FM	7	Rot	7	92711
TOLEDO												
Flower	H J van Buaren	157	8 511	225	81	14 684	237	250FM	9	Rot	9	57811
Mumee Valley		141	5 167	380	133	25 513		250FM	6	Rot	6	57911
Mercy	R M Reineck	234	13 336	54	241	36 677		250FM	14	Rot	14	58011
Riverside	Edward F Kurt	111	7 316	141	84	7 591		265FM	8	Rot	8	58111
St Charles	J P Moran Jr	256	9 187	221	95	22 875		250FM	9	Rot	9	95111
St Vincent	E C Curtzwiler	156	9 [illegible]	347	243	9 097	238	250FM	14	Rot	14	58211
Toledo		315	11 [illegible]	460	382	39 318		250FM	20	Rot	20	58311
WARREN												
Trumbull Memorial	R A Havill	241	10 [illegible]		104	33 311		250FM	12	Rot	12	98011
YOUNGSTOWN												
St Elizabeth	David Cinder	408	23 326	604	204	55 [illegible]	233	225FM	19	Rot	19	58411
Youngstown	W D Loeser	702	27 891	748	467	174 344		250FM*	24	Rot	24	58511
OKLAHOMA—Hospitals 7 Internships 94												
OKLAHOMA CITY												
Mercy Hospital Oklahoma City General	W J Dowling	19	10 129	245	131	37 303	240	250PM	10	Rot	10	58611
St Anthony	J M Farris	355	16 922	4 5	1 8	41 537		200PM	12	Rot	12	58711
University Hospital	J M White	65	10 442	392	260	89 056	241	175PM	12	Rot	12	58811
									6	Mixed[1]	6	58812
									4	Mixed	4	58813
									4	Mixed[3]	4	58814
									3	St Path	3	58839
Veterans Administration		440	5 694	278	206	4 540	240		4	St Med	4	58932
Wesley	C W Cathey	170	10 430	256	122	7 034		300PM	8	Rot	8	59011
TULSA												
Hillcrest Medical Center	F W Pruitt	400	21 252	383	193	18 943	242	150FM	19	Rot	19	59111
St John	H A Bennett	555	24 690	515	218	18 822		150FM*	12	Rot	12	59211
OREGON—Hospitals 7 Internships 101												
EUGENE												
Sacred Heart General	W I Holcomb	180	12 578	283	279	9 055		250PM	8	Rot	8	59311
PORTLAND												
Emanuel	Melvin W Preese Mildred M Thomas	231	17 800	442	263	17 755		250PM	14	Rot	14	59411
Good Samaritan	J O Branford	300	15 424	362	204	9 385		250PM	15	Rot	15	59511
									1	St Path	1	59536
Portland Sanit and Hospital	H W Halverson	152	10 324	215	193	10 852		200PM	9	Rot	9	59611
Providence	J F Holland	272	19 628	331	211	16 013	243	250PM	12	Rot	12	59711
St Vincent	E I Livingstone	284	18 641	347	205	22 605		250PM	12	Rot	12	59811
Univ of Oregon Medical School Hospitals and Clinics	C N Hohman	510	12 366	753	513	166 255		125FM	30	Rot	30	59911
PENNSYLVANIA—Hospitals 73 Internships, 885												
ABINGTON												
Abington Memorial	J R Schumacher	374	15 514	402	209	16 955		250FM*	12	Rot	12	60011
ALLENTOWN												
Allentown	R L Schaeffer	453	17 951	561	283	23 513		225FM	14	Rot	14	60111
Sacred Heart	E K Sipes	263	11,397	466	176	51 658		225FM*	10	Rot	10	60211
ALTOONA												
Altoona	J M Stowell	256	11 800	418	179	16,322		300FM	12	Rot	12	60311
Mercy	J M O Leary	133	5 629	243	57	28 083		300FM	4	Rot	4	60411
BETHLEHEM												
St Luke's	W L Estes Jr	387	11 093	489	247	45 603		200FM*	12	Rot	12	60511
BRISTOL												
Lower Bucks County	I F Erlichman	181	11 240	161	85	39 974		200FM*	8	Rot	8	97411

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PENNSYLVANIA—Continued												
BRYN MAWR												
Bryn Mawr	W S Parker	287	11 812	390	212	10 620		175FM	12	Rot	12	60611
BUTLER												
Butler County Memorial	John T Burn	216	9 913	257	51	7 590		300FM*	6	Rot	6	98911
CHESTER												
Chester	A H Silvers	211	10 155	327	180	26 436		250FM	8	Rot	8	60711
DANVILLE												
George T Geisinger Memorial	W I Buchert	217	11 344	279	156	106 526		150FM	12	Rot	12	60811
DARBY												
Thomas M Fitzgerald-Mercy	W J Zintl	288	13 045	397	187	44 769		200FM	12	Rot	12	60911
EASTON												
Easton	T T Clarke David Feinberg	215	9,012	413	236	35 051		200FM	10	Rot	10	61011
ERIE												
Hamot	Joseph M Paso	309	13 227	461	220	149 405		250FM	10	Rot	10	61111
St Vincent	H J McLaren	261	12,633	378	199	16 231		250FM	10	Rot	10	61211
GREENSBURG												
Westmoreland	James A Dull	236	10 541	373	127	42 931		350FM*	4	Rot	4	61311
HARRISBURG												
Harrisburg	W P Dailey	511	21,596	830	472	60 542		200FM	24	Rot	24	61411
Harrisburg Polyclinic	Wm Bates	416	14,974	522	252	21 395		200FM	18	Rot	18	61511
JOHNSTOWN												
Conemaugh Valley Memorial	Wm Ayres	373	13,331	518	159	46,070		250FM	12	Rot	12	61611
Mercy	D C Borecky	200	8 451	186	55	22 130		250FM*	6	Rot	6	81611
LANCASTER												
Lancaster General	P R Davidson	368	17 885	521	262	66 528		200FM	12	Rot	12	61811
St Joseph	C S Stapinski	216	8 556	292	141	13 069		250FM	6	Rot	6	61911
McKEESPORT												
Mckeesport	W J Letter	460	17,296	609	212	27,832		300FM	10	Rot	10	62011
NATRONA HEIGHTS												
Allegheny Valley	G F Edmonston	186	11 329	314	91	6 500		300FM	4	Rot	4	93611
NORRISTOWN												
Montgomery	S C Carfagno	159	8 904	235	100	51,910		250FM	6	Rot	6	62111
Sacred Heart	Alan Dorian	156	9 152	210	76	36 605		250FM	6	Rot	6	62211
PHILADELPHIA												
Albert Einstein Medical Center	H Henry Moss	662	23 442	985	495	140 207		75FM	39	Rot	39	63111
Northern Division		Experience scheduled at both divisions										
Southern Division												
Chestnut Hill	E H McGehee	120	6 527	137	100	46 801		250FM	6	Rot	6	91011
Episcopal	C S Kambe	338	11,422	400	175	80 972		150FM	13	Rot	13	62311
Frankford	W T Annon, II	161	8 376	236	122	74,321		250FM*	8	Rot	8	62411
Germantown Dispensary Hosp	N F Moury	273	9,958	485	190	56 002		150FM	12	Rot	12	62511
Graduate Hospital of the University of Pennsylvania	Dick D Harrell	269	8 262	291	180	63 159	246	100FM	12	Rot	12	62611
Hahnemann Medical College and Hospital	H A Taggart	432	14 521	638	322	63 921		75FM	16	Rot	16	62711
Hospital of University of Pennsylvania	H M Dana	675	23 886	643	457	162,038		42FM	32	Rot	32	62811
Jefferson Medical College Hospital	John R Griffith	766	24,072	662	332	90 522		50FM	32	Rot	24	63011
Lankenau	A P Angelides	330	13,375	343	231	27 090		175FM	14	Rot	12	63211
Memorial	F E Haentze	131	5 149	189	54	13 806	247	250FM	6	Rot	6	63311
Mercy Douglass	John W Thomas	188	5 111	126	52	9,363		175FM	8	Rot	8	63411
Methodist Episcopal	J F McCloskey	171	6 282	179	54	29,381		200FM*	8	Rot	8	63511
Misericordia	Paul Lenahan	254	9 785	377	185	44 962		200FM	15	Rot	15	63611
Nazareth	C J Schreader	171	8 885	173	90	18 961		300FM	10	Rot	10	63811
Northeastern	J R Minehart	114	4,956	143	53	23,800	248		6	Rot	6	97611
Pennsylvania		326	15,579	403	260	142,970	249	NoneFM	18	Rot	18	63911
Philadelphia General	T J Levitt	1 376	24 063	2 098	1 162	308 053		63FM	90	Rot	90	64011
Presbyterian	T C Fetter	261	9 685	365	221	50 989		225FM	14	Rot	14	64111
St Agnes	J J Cava	204	8 479	204	52	23 740		300FM	8	Rot	8	64211
St Joseph's	T J Mave	170	7,449	163	86	18 108		200FM	6	Rot	6	64311
St Mary's Franciscan	A M Alberico	185	6 427	163	102	26 821		300	6	Rot	6	64511
Woman's	H E diSilvestro	108	4 571	120	51	21 135		150FM	6	Rot	6	64711
PITTSBURGH												
Allegheny General	R A Wolff	496	18 028	620	284	57 776		182FM	18	Rot	18	64811
Health Center Hospitals-University of Pittsburgh School of Medicine		896	37 516	913	636	168 171	288	100FM	13	Rot	13	65211
Mercy	C C Altman	561	15 615	608	335	86 782		225FM	12	Rot	12	64911
Montefiore	P J Rosenthal	280	11 291	328	188	46 770		200FM	15	Rot	15	65011
Pittsburgh	G D Patton	193	7 080	278	86	25 121		300FM	6	Rot	6	65111
St Francis Gen Hosp and Rehabilitation Institute	H E Borus	575	15 435	477	197	64 466		225FM	22	Rot	22	88111
St Joseph's Hospital & Dispensary	F N Tellow	129	6 482	178	59	12 447		400FM	6	Rot	6	65511
St Margaret Memorial	T N Meredith	125	4,364	130	72	11 890		300FM*	6	Rot	6	65611
Shadyside	W G Watson	325	10 022	335	177	36 672		350FM	10	Rot	10	65711
South Side	F R Franke	267	11 936	415	164	9 417		350FM	9	Rot	9	65811
Western Pennsylvania	W C Wycoff G J Rhodes	460	17 919	530	302	45 247		225FM	18	Rot	18	67911
READING												
Reading	J R McShane	470	15 990	635	249	20 592		200FM	14	Rot	14	66111
St Joseph's	James Daly	204	8,812	327	164	38 130		250FM	6	Rot	6	66211
SAYRE												
Robert Packer	Wm C Beck	230	13 193	286	177	60,173		150FM*	12	Rot	12	66411
SCRANTON												
Scranton State	James A Kane	184	5 917	369	121	27 845		248FM	10	Rot	10	66611
SEWICKLEY												
Sewickley Valley	J R Johnston III	182	8,101	289	122	34 469		300FM	8	Rot	8	66711
UNIONTOWN												
Uniontown	W R McGee	238	9,275	492	144	197,852		350FM	5	Rot	5	66811
WASHINGTON												
Washington	J N McMahan	279	12,305	408	147	95 659		325FM*	8	Rot	8	66911
WEST CHESTER												
Chester County	Wm Hewson	152	5 561	193	69	56 610		350FM*	6	Rot	6	88211
WILKES-BARRE												
Mercy	Angelo L Luchi	172	8,304	314	81	24 466		300FM	4	Rot	4	67011
Wilkes Barre General	S L Hudacek	270	11,344	481	153	20 869		300FM	10	Rot	10	67111

Abbreviations and other references are listed on pages 656 and 657

Name of Hospital and Location	Program Director	Average Daily Census	Total Admissions	Total Number of Deaths	Autopsies	Outpatient Visits	Affiliated Services	Beginning Stipend (Month)	Authorized Complement	Type	Total Sought Through NIMP	NIMP Code
PENNSYLVANIA—Continued												
WILKINSBURG												
Columbia	E I Waisbrot	208	7 829	283	100	17 355		300FM	6	Rot	6	67211
WILLIAMSPORT												
Williamsport	W D Todhunter K L Cooper	202	11 224	386	165	29 569		225FM*	8	Rot	8	67311
YORK												
York	Robert Evans	303	17 279	517	215	30 887		275PM	10	Rot	10	67411
PUERTO RICO—Hospitals 9 Internships 121												
AGUADILLA												
Aguadilla District		209	6 605	224	153	20 469		150FM	10	Rot [9]		
ARECIBO												
Arecibo District	A M Somohano	221	8 176	265	171	27 824		150FM	15	Rot	15	81811
CAPARRA HEIGHTS												
University District	R M Bryan	219	7 136	392	229	31 050		100FM	16	Rot [9]		
FAJARDO												
Fajardo District									12	Rot [9]		
PONCE												
Hospital de Damas	E C Jordan	110	5 900	92	35	4 769		100FM	7	Rot [9]		
Ponce District General	Americo Serra	378	9 838	548	356	36 457		100FM	16	Rot	16	81911
RIO PIEDRAS												
Rio Piedras Municipal	P I Rullan	170	7 879	212	115	53 590		100PM	13	Rot [9]		
SAN JUAN												
Presbyterian	R Jimenez	124	7 258	141	40	18 453		100FM	8	Rot [9]		
San Juan City	F R Morales	296	11 360	408	289	123 085		100FM	24	Rot [9]		
RHODE ISLAND—Hospitals 6 Internships 66												
NEWPORT												
Newport Hospital	A M Burgess	180	6 725	232	72	22 740		100FM*	8	Rot	8	67511
PAWTUCKET												
Memorial	A M Burgess	200	9 978	357	157	11 340		200FM	8	Rot	8	67611
PROVIDENCE												
Miriam	A M Burgess	166	6 448	189	72	15 719	250	175FM	8	Rot	8	95311
Rhode Island	Henry McCusker	540	20 903	993	402	50 341	250	100FM	20	Rot [7]	20	67711
Roger Williams General	Wm H Foley	186	9 576	231	69	6 163		200FM*	10	Rot	10	67811
St Joseph's	J A Hindle	227	7 961	347	83	16 511	251	150FM*	12	Rot	12	67911
SOUTH CAROLINA—Hospitals 6 Internships 96												
CHARLESTON												
Medical College of South Carolina Teaching Hospitals (Roper and Medical College Hospitals)	Cheves Smythe	484	23 936	652	320	75 707	252	125FM	32	Rot	24	68011
COLUMBIA												
Columbia	H H DuBose	409	18 770	495	140	70 524		175FM*	15	Rot	15	68111
FLORENCE												
McLeod Infirmary	N B Baroody	158	8 893	320	102	19 061		250FM	6	Rot	6	68211
GREENVILLE												
Greenville General	J F Whitaker	48	22 518	650	229	59 034		250None	24	Rot	24	68311
ORANGEBURG												
Orangeburg Regional	H L Luten	156	7 227	252	62	15 076		250FM*	4	Rot	4	68411
SPARTANBURG												
Spartanburg General	F P Champion	318	15 726	458	129	63 923		325PM	15	Rot	15	68511
SOUTH DAKOTA—Hospitals 3 Internships 19												
SIOUX FALLS												
McKennan	R J Quinn	187	10 154	225	92	8 899		150FM	7	Rot	7	68611
Sioux Valley	R F Nelson	166	10 623	268	108	8 807		150FM	7	Rot	7	68711
YANKTON												
Sacred Heart	J J Lidd	159	5 261	191	48	6 985		225FM	5	Rot	5	68811
TENNESSEE—Hospitals 15 Internships 260												
CHATTANOOGA												
Baroness Erlanger	R Boatwright	434	20 302	607	317	39 389	253	200FM	14	Rot	14	68911
KINGSPORT												
Holston Valley Community	J K Maloy	278	12 599	270	108	26 234		345PM*	12	Rot [9]		
KNOXVILLE												
East Tennessee Baptist	J C Roberts Jr	230	14 434	248	82	5 152	254	200FM*	8	Rot	8	69011
Fort Sanders Presbyterian	J I Garcia	166	7 406	173	52	5 471	255	250FM	8	Rot	8	69111
St Mary's Memorial	M P Fecher	280	13 494	321	118	1 219		225FM*	12	Rot [9]		
University of Tennessee Memorial Research Center and Hospital	J A Burdette	186	8 088	349	160	42 184		300FM	14	Rot [9]		
MEMPHIS												
Baptist Memorial	P Milnor Jr	704	34 539	775	318	22 590	256	300FM	20	Rot	20	69411
City of Memphis Hospitals	R H Patterson	532	23 576	1 321	892	179 718	257	150FM*	48	Rot [9]		
Methodist	J C Loughead	338	19 409	344	104	26 716	258	300FM	15	Rot [9]		
St Joseph	M J Roach Jr	244	11 917	312	109	21 123		300FM	12	Rot [9]		
NASHVILLE												
Baptist	F C Womack Jr	303	17 434	370	142	10 696		400FM	16	Rot	16	69911
George W Hubbard	J M Robinson	165	5 228	308	160	36 434		125FM*	14	Rot	14	69811
Nashville General	L W Edwards	144	7 176	368	106	53 042		300FM*	12	Rot	6	70011
St Thomas	R H Kampmeier	215	13 762	312	119	18 065	259	300FM*	16	Rot	16	70111
									4	Mixed [1 2]	4	70120
Vanderbilt University Hospital	J L Shapiro	333	12 787	432	257	83 740	260	50FM	12	St Med	12	70232
									12	St Surg	12	70233
									8	St Ped	8	70234
									3	St Path	3	70236
TEXAS—Hospitals 22, Internships 347												
AUSTIN												
Brackenridge	R R Ross	204	10 148	353	157	37 906		175FM	14	Rot	14	70411
CORPUS CHRISTI												
Memorial	G Schuster III	219	14 926	365	123	42 703	261	125FM*	7	Rot	7	70511

Abbreviations and other references are listed on pages 656 and 657

Name of Hospital and Location	Program Director	Average Daily Census	Total Admissions	Total Number of Deaths	Autopsies	Outpatient Visits	Affiliated Services	Beginning Stipend (Month)	Authorized Complement	Type	Total Sought Through NIMP	NIMP Code
TEXAS—Continued												
DALLAS												
Baylor University Medical Center	R Tompsett	539	30 113	186	278	89 207	262	200PM	18	Rot	18	70611
									2	St Med	1	70639
									1	St Surg	1	70633
Children's Medical Center	Edward Pratt	87	4 188	86	73	18 246		125FM	4	St Ped	4	95534
Methodist	F W Davidson Jr	218	17 510	253	70	8 711		200FM*	16	Rot	16	70711
Parkland Memorial	Ben Willon	796	21 995	841	70	216 998		125PM	30	Rot	30	70811
									10	St Med	10	70832
									2	St Path	2	70836
St Paul	D A Sutherland	299	18,060	398	222	38 893		200FM	12	Rot	10	70911
Veterans Admin	Ben Friedman	558	6 088	372	306	4 096	262		12	St Med	12	58732
EL PASO												
Hotel Dieu Sisters	J C Postlewaite	171	11 422	271	117	3 559		150FM	8	Rot	8	95411
R E Thomason General	G W Iwen	152	4 867	259	206	12 621		200FM	8	Rot	8	71011
FORT WORTH												
John Peter Smith	D I Neal	116	5 602	132	177	70,465		100PM	13	Rot	13	71111
St Joseph	W S Lorimer Jr	259	16 120	354	130	20 885	264	200FM	17	Rot	17	71311
GALVESTON												
Univ of Texas Medical Branch Hospitals		785	16 210	621	537	120 889		110FM	30	Rot	30	71411
									6	St Med	6	71432
									1	St Path	1	71436
HOUSTON												
Baylor University College of Medicine Hospitals												
Jefferson Davis	I D McMurrey	311	18 701	57	151	28 515	265	100FM	26	Rot	26	71611
									6	St Med	6	71632
									4	St Surg	4	71633
									4	St Ped	4	71634
Methodist	D I Curb	523	15 403	312	219	65 674	266	75FM	8	Rot	8	71711
									4	St Med	4	71739
									3	St Surg	3	71733
									18	Rot	18	71511
Hermann	J J Crozier	863	28 022	678	359	73 574		125FM	8	Rot	8	98211
Memorial	J I Hoaglin	351	20 400	317	111	9 815		195PM	1	St Path	1	83136
Texas Children's	H S Rosenberg	78	5 702	151	14	9 855		75FM				
SAN ANTONIO												
San Antonio Baptist Memorial	Walter R Cook	240	18 254	157	251	32 007		100FM	10	Rot	10	72111
Robert B Green Memorial	John W Simpson	186	8 979	185	276	69 468		100FM	24	Rot	24	72211
Santa Rosa	F R Shaeffer	351	22 844	603	291	32 040		200FM*	12	Rot	12	72311
TEMPLE												
Scott and White Memorial	R D Haines	255	11 667	254	122	11 151		200FM	8	Rot	8	72511
UTAH—Hospitals, 7, Internships 98												
OGDEN												
St Benedict's	W P Dunes	106	7 648	151	79	15 995		225PM*	10	Rot	10	72711
Thomas D Dee Memorial	F M Jeppson	126	10 719	226	116	2 991		275PM	12	Rot	12	72811
SALT LAKE CITY												
Dr W H Groves Latter Day Saints	F W Nielsen	318	21 592	569	28	16 229	267	225FM	21	Rot	21	72911
Holy Cross	C M Parrish	177	10 158	210	102	36 177	268	150FM*	8	Rot	8	73011
St Mark's	F F Waldo	220	12 656	249	153	5 185		250PM	12	Rot	12	73111
Univ of Utah Affiliated Hospitals												
Salt Lake County General	F H Tyler	229	4 511	418	287	70 071	269	175PM	14	Rot	11	73211
									11	St Med	11	73232
									6	St Surg	6	73233
									4	St Ped	4	73234
Veterans Administration	Harold Brown	644	2 965	216	196	10 773	268					
VERMONT—Hospitals, 2, Internships 23												
BURLINGTON												
Dr Goesbriand Memorial	F W Van Buskirk	154		177	97	30 910		100FM*	9	Rot	9	73411
Mary Fletcher	F F Amidon	187	8 555	214	165	18 551		75FM	14	Rot	14	73511
VIRGINIA—Hospitals, 16, Internships, 247												
ALEXANDRIA												
Alexandria	W F Weaver Jr	167	11 037	217	114	22 458		175PM	10	Rot	10	73611
CHARLOTTESVILLE												
Univ of Virginia Hospital	J M Stacey	357	15 285	855	285	55 815	270	150FM	12	Rot	12	73711
									2	Mixed[1]	2	73720
									12	St Med	12	73732
									8	St Surg	8	73733
									6	Rot	6	89411
NEWPORT NEWS												
Mary Immaculate	F W Sale	103	6 537	126	19	4 227		150FM	8	Rot	8	73911
Riverside	F F Alexander Jr	213	10 016	255	89	11 923		200FM	10	Rot		
NORFOLK												
De Paul	J J Johns Jr	24	13 932	269	201	75 849		200FM	12	Rot	12	74011
Norfolk General	A J Hislop	281	13 898	471	200	24,636		150FM	20	Rot	20	74111
PETERSBURG												
Petersburg General	C P J Burgwyn	272	11 197	307	113	6 275		250FM	12	Rot	12	99611
PORTSMOUTH												
Maryview	H F Brent	120	7 255	148	52	15,451		250FM	8	Rot	8	99711
RICHMOND												
Johnston-Willis	T N P Johns	220	9 180	215	97	8 655	272	200FM	12	Rot	12	74211
Medical College of Virginia Hospital Division (Memorial Dooley and St Philip Hospitals)	Kinloch Nelson	950	26 788	992	864	95 995		100FM	40	Rot	10	74311
									8	St Med	8	74332
									10	St Surg	10	74333
									2	St Path	2	74336
									18	Rot	18	99811
		358	16 457	335	138	7 837		250FM	8	Rot	8	74411
Richmond Memorial	C Williams Jr	113	4,967	117	44	3,408	273	250FM				
Stuart Circle		136	6 792	157	84	7 051		150FM	6	Mixed[2]	6	74530
ROANOKE		158	5,995	158	63	76,884		275FM*	6	Rot	6	74711
Jefferson	R H Jones Jr	322	14,269	267	135	17,294		250FM*	20	Rot	16	74811
Lewis Gale	M A Johnson III											
Roanoke Memorial		229	11,293	288	155	9,477		250FM	6	Rot	6	74911
WINCHESTER												
Winchester Memorial	Richard Hughes											

Abbreviations and other references are listed on pages 656 and 657

Name of Hospital and Location	Program Director	Average Daily Census	Total Admissions	Total Number of Deaths	Autopsies	Outpatient Visits	Affiliated Services	Beginning Stipend (Month)	Authorized Complement	Type	Total Sought Through NIMP	NIMP Code
WASHINGTON—Hospitals, 15 Internships 178												
SEATTLE												
Children's Orthopedic	Robert Aldrich	130	7 246	176	167	25 638	274	135FM	6	St Ped	6	99031
Doctors	H V Hartzell	188	12 589	252	121	1 262	275	200FM*	8	Rot	8	75111
King County												
Unit No 1 (Harborview)	P L Peterson	487	12 263	1 031	698	121 739		100FM	32	Rot	32	75211
Providence	D H Coleman	237	14 942	385	160	1 135		250FM	12	Rot	12	75311
St Frances Xavier Cabrini	Abby Franklin	106	7 357	145	101		275	200FM	6	Rot	6	82311
Seattle General	R S Mo[illegible]man	84	5 064	152	43	1 145	275	150FM*	5	Rot	5	75411
Swedish	J M V Hagen	306	17 999	465	257	36 866	275	200FM*	16	Rot	16	75511
University	J R Hogue[illegible]		576	37	32	3 445		130PM	7	Rot	7	91811
									17	Mixed[1 2 3 4]	17	91820
Virginia Mason	R P Pillow	153	10 335	290	188	4 818	275	125FM*	10	Rot	10	75611
SPOKANE												
Deaconess	J F Judden	191	14 033	347	172	13 330		200FM*	12	Rot	12	75711
Sacred Heart	P Gurbicki											
	C F Schnug	381	24 081	510	231	11 220		200FM*	15	Rot	15	75811
St Luke's	R Lynberg	151	7 346	214	75		277	200FM*	6	Rot	6	75911
TACOMA												
Mountain View General	Robert Lane											
	C Allison	134	5 230	431	186	26 363		220FM*	10	Rot	10	76011
St Joseph	F A Kunar	154	11 976	235	83	10 465		150FM	6	Rot	6	76111
Tacoma General	R R Burt	184	10 255	210	169	13 743	278	150FM*	10	Rot	10	76211
WEST VIRGINIA—Hospitals 10 Internships 92												
CHARLESTON												
Charleston General	J V McKenzie											
	W McClung	193	5 128	224	95	11 072		200FM	10	Rot	10	76411
Kanawha Valley Memorial	John C Copeley	59	5 353	103	28	2 583		200FM*	6	Rot	6	76511
Memorial	W F Lawton	241	12 982	223	162	12 097	275	200FM*	11	Rot	11	90211
HUNTINGTON												
Cabell Huntington	Wm Bray	181	10 335	213	126	15 195	280	225FM	8	Rot	8	97611
St Mary's	R A Barnett	352	12 629	383	135	21 873		250FM	14	Rot	14	76611
PARKERSBURG												
Camden Clark Memorial	S W Goff	175	8 576	292	86	9 297		150FM	6	Rot	6	76711
St Joseph's	J H Gile	189	7 355	249	62	16 511		150FM	6	Rot[8]		
WEIRTON												
Weirton General	C Naymick	131	7 651	137	43	15 657	281	250FM	6	Rot	6	99111
WHEELING												
Ohio Valley General	M B William	500	12 771	317	179	15 057		250FM	15	Rot	15	76911
Wheeling	George M Kellas	195	8 405	215	89	11 767		250FM	10	Rot	10	77011
WISCONSIN—Hospitals, 21 Internships 231												
EAU CLAIRE												
Luther	R R Richards	200	9 790	231	126	12 707		250FM	6	Rot	6	77111
JANESVILLE												
Mercy	M B Llewllyn	152	8 300	215	72	4 494		150FM	5	Rot	5	77311
LA CROSSE												
La Crosse Lutheran	S B Gunderson Jr	160	8 847	193	67	3 000		250FM	6	Rot	6	77411
St Francis	R E McMahon	155	10 187	277	103	31 861		200FM	8	Rot	8	77511
MADISON												
Madison General	J M Wilkie	242	10 824	286	145			175FM*	14	Rot	14	77611
Methodist	H W Mahaffey	110	4 798	126	72	3 275		150FM	5	Rot	5	77711
St Mary's	Dean M Connors	229	10 918	258	146	3 339		200FM*	10	Rot	10	77811
University Hospitals		507	14 458	400	327	67 732		75FM	12	Mixed[1]	12	77983
									6	Mixed[2]	6	77984
									4	St Ped	4	77934
MARSHFIELD												
St Joseph's	G F Magnin	199	11 495	297	165	3 619		250FM*	7	Rot	7	78011
MILWAUKEE												
Evangelical Deaconess	R S Haukohl	233		332	139	2 306	283	220FM*	12	Rot	12	78211
Milwaukee Children's	H W Heike	126	6 851	100	93	34 312	284	245PM	2	St Ped[9]		
Milwaukee County	H M Coon	511	19 789	1 383	699	141 590		162PM	36	Rot	36	78411
Milwaukee	D J Carlson	250	11 257	247	142	43 502	285	250PM	12	Rot	11	78511
Mericordia	John Haugh	140	9 338	166	82	910		245PM*	6	Rot	6	89711
Mount Sinai		247	13 871	356	143	13 871	286	200FM	14	Rot	14	78711
St Francis	J M Lubitz	214	10 130	248	81	2 941		200FM	12	Rot	12	83211
St Joseph's		318	15 448	318	196	19 170	287	245PM	12	Rot	12	78811
St Luke's	A J Kryger	221	10 170	279	126	24 399	282	200FM*	12	Rot	12	78911
St Mary's	John D Conway											
	M J Ciccantelli	1 2	7 697	230	139	8 943	291	245None	16	Rot	16	79011
St Michael	Norbert Bauch	224	10 200	228	92	11 491		200FM*	10	Rot	10	79111
WAUSAU												
St Mary's	J D Kramer	153	8 701	155	68	9 223		150FM	4	Rot	4	79511

Abbreviations and other references are listed on pages 656 and 657

HOSPITALS APPROVED FOR JUNIOR ROTATING INTERNSHIPS IN THE DOMINION OF CANADA

The following list of hospitals that conform to the standards of The Canadian Medical Association is published for the information of graduates interested in an internship appointment in a Canadian hospital. Hospitals that are approved as conforming, to the standards of The Canadian Medical Association may be considered as offering, internships equivalent in educational value to those in hospitals approved for intern training by the Council.

This list revised to July 1 1960 was furnished by The Canadian Medical Association

Name of Hospital	Location	Name of Hospital	Location	Name of Hospital	Location
Royal Columbian Hosp	New Westminster B C	Moose Jaw Union Hospital	Moose Jaw Sask	St Joseph's Hospital	Hamilton Ont
St Paul's Hospital	Vancouver B C	Regina General Hospital	Regina Sask	Hotel Dieu Hospital	Kingston Ont
St Vincent's Hospital	Vancouver B C	Regina Grey Nuns Hospital	Regina Sask	Kingston General Hospital	Kingston Ont
Vancouver General Hospital	Vancouver B C	St Paul's Hospital	Saskatoon Sask	Kitchener Waterloo Hospital	Kitchener, Ont
Royal Jubilee Hospital	Victoria B C	Saskatoon City Hospital	Saskatoon Sask	St Joseph's Hospital	London Ont
St Joseph's Hospital	Victoria B C	University Hospital	Saskatoon Sask	Victoria Hospital	London Ont
Calgary General Hospital	Calgary Alta	St Boniface General Hosp	St Boniface Man	Oshawa General Hospital	Oshawa Ont
Holy Cross Hospital	Calgary Alta	Grace Hospital	Winnipeg Man	Ottawa Civic Hospital	Ottawa Ont
Edmonton General Hospital	Edmonton Alta	Misericordia Hospital	Winnipeg Man	Ottawa General Hospital	Ottawa Ont
Misericordia Hospital	Edmonton Alta	Winnipeg General Hospital	Winnipeg Man	Hop St Louis-Marie de Montfort	Ottawa Ont
Royal Alexandra Hospital	Edmonton Alta	Mckellar General Hospital	Fort William Ont	Gen Hosp of Port Arthur	Port Arthur Ont
University of Alberta Hosp	Edmonton Alta	Hamilton General Hospital	Hamilton Ont	St Joseph's General Hosp	Port Arthur Ont

Name of Hospital	Location
St Catharines Gen Hosp	St Catharines, Ont
St Joseph's Hospital	Sarnia, Ont
St Thomas Elgin Gen Hosp	St Thomas, Ont
Sarnia General Hospital	Sarnia, Ont
Scarborough Gen Hosp	Scarborough Ont
Sudbury General Hospital	Sudbury, Ont
New Mount Sinai Hospital	Toronto, Ont
St Joseph s Hospital	Toronto Ont
St Michael s Hospital	Toronto Ont
Toronto E Gen & Ortho Hosp	Toronto Ont
Toronto General Hospital	Toronto Ont
Toronto Western Hospital	Toronto Ont
Wellesley Hospital	Toronto Ont
Women s College Hospital	Toronto Ont
Grace Hospital	Windsor Ont
Hotel Dieu of St Joseph	Windsor, Ont
Metropolitan General Hospital	Windsor, Ont
Hotel Dieu Saint Vallier	Chicoutimi, Que
Hopital du Sacre Coeur	Montreal Que
Hopital St Luc	Montreal, Que
Hotel Dieu de Montreal	Montreal, Que
Jewish General Hospital	Montreal, Que
Maisonneuve Hospital	Montreal Que
Montreal General Hospital	Montreal, Que
Notre Dame Hospital	Montreal, Que
Queen Elizabeth Hospital	Montreal, Que
Royal Victoria Hospital	Montreal, Que
Reddy Mem Hosp (Westmount)	Montreal Que
St Mary s Hospital	Montreal Que
Hopital de l Enfant Jesus	Quebec Que
Hopital du Saint Sacrement	Quebec Que
Hopital St Francois d'Assise	Quebec, Que
Hotel Dieu de Quebec	Quebec Que
Jeffery Hale s Hospital	Quebec Que
Hop Gen St Vin de Paul	Sherbrooke, Que
Hotel Dieu de Sherbrooke	Sherbrooke Que
Sherbrooke Hospital	Sherbrooke Que
Hopital St Joseph	Trois Rivières Que
Hopital General de Verdun	Verdun Que
Victoria Public Hospital	Fredericton, N B
Moncton Hospital	Moncton N B
Saint John General Hosp	Saint John, N B
Halifax Infirmary	Halifax N S
Victoria General Hospital	Halifax N S
St John s General Hospital	St John's, Nfld

ABBREVIATIONS AND NOTES

- FM Full maintenance
- PM Partial maintenance
- * Variation in stipend or maintenance for married intern
- St Straight
- 1 Medicine major component of mixed internship
- 2 Surgery major component of mixed internship
- 3 Obstetrics major component of mixed internship
- 4 Pediatrics major component of mixed internship
- 5 Pathology major component of mixed internship
- 6 Psychiatry major component of mixed internship
- 7 May include appointments beyond 12 months
- 8 Internship equivalent included in 2 year Family Practice Program
- 9 Hospital does not participate in N I M P
- 10 Mixed internship is first year of approved 2 year program in General Practice

Affiliations as Referred to in Column Headed "Affiliated Service"

100 Children s Hospital, Birmingham Ala
101 Crippled Children s Clinic and Hospital Veterans Administration Hospital Birmingham, Ala
102 Maricopa County General Hospital Phoenix Ariz
103 Pima County General Hospital Tucson, Ariz
104 Arkansas Children s Hospital Little Rock Ark
105 Veterans Administration Hospital Little Rock Ark
106 Children's Hospital of East Bay, Highland-Alameda County Hospital Oakland Calif
107 Los Angeles County Hospital Los Angeles Calif
108 California Babies and Children s Hospital Los Angeles Santa Monica Hospital Santa Monica Calif
109 Children s Hospital Los Angeles Calif
110 Los Angeles County Hospital University Hospital Los Angeles Harbor General Hospital Torrance Calif
111 Fairmont Hospital of Alameda County San Leandro Calif
112 Mary s Help Hospital San Francisco Calif
113 Children s Hospital Mary s Help Hospital San Francisco Southern Pacific Hospital and Sanatorium Tucson Ariz
114 Children s Hospital St Luke s Hospital San Francisco Calif
115 Santa Barbara General Hospital Santa Barbara Calif
116 California Hospital, Los Angeles Calif
117 Children s Hospital University of Colorado Medical Center Denver Colo
118 Children s Hospital Denver General Hospital Denver Colo
119 Children s Hospital, Denver Colo
120 Hospital of St Raphael, New Haven Conn
121 Southbury Training School Southbury Conn Veterans Administration Hospital West Haven Conn
122 DeWitt Army Hospital Ft Belvoir, Va
123 Children s Hospital Washington D C
124 Arlington Hospital Arlington Va
125 District of Columbia General Hospital Washington D C
126 Children s Hospital District of Columbia General Hospital Washington D C
127 Duval Medical Center Jacksonville Fla
128 Variety Children's Hospital Miami Fla
129 Our Lady of Angels Hospital, Pensacola Fla
130 Mercy Hospital St Petersburg Fla
131 Clara Frye Memorial Hospital Tampa Fla
132 Jackson Memorial Hospital, Miami Fla
133 Athens General Hospital Athens Ga
134 Grady Memorial Hospital Atlanta, Ga
135 Veterans Administration Hospital, Atlanta Ga
136 Battey State Hospital, Rome, Ga
137 Maluhia Hospital Honolulu Hawaii
138 Oak Forest Infirmary, Oak Forest, Ill
139 Children s Memorial Hospital, Chicago Ill
140 Cook County Hospital Frank Cuneo Memorial Hospital Chicago Ill
141 Mercy Hospital, Chicago Ill
142 Illinois Masonic Hospital, Chicago, Ill
143 Macon County Tuberculosis Sanitarium Decatur, Ill
144 St Joseph s Hospital St Luke s Hospital Presbyterian Hospital Porter Sanatorium and Hospital Denver Colo
145 Denver General Hospital, Denver Colo
146 Marion County General Hospital, Indianapolis Ind
147 Booth Memorial Hospital Des Moines Iowa
148 Children s Mercy Hospital Kansas City Mo
149 Sedgwick County Hospital Wichita Kans
150 Booth Memorial Hospital, Sedgwick County Hospital Wichita Kans
151 Children s Hospital, Louisville Ky
152 Louisville General Hospital Louisville Ky
153 Lallie Kemp Charity Hospital, Independence La
154 Sara Mayo Hospital, New Orleans La
155 Charity Hospital of Louisiana, New Orleans La
156 Confederate Memorial Medical Center Shreveport La
157 Johns Hopkins Hospital Baltimore, Md
158 University Hospital Baltimore, Md
159 Peninsula General Hospital Salisbury, Md
160 Baltimore City Hospitals, Baltimore, Md
161 Hospital for Women, Baltimore Md
162 Boston City Hospital, Boston, Mass
163 New England Center Hospital, Boston Mass Mount Auburn Hospital Cambridge, Mass
164 St Margaret s Hospital Boston Mass
165 Beverly Hospital, Beverly Mass Beth Israel Hospital Boston Mass Mount Auburn Hospital Cambridge, Mass Salem Hospital Salem Mass
166 Boston City Hospital, Boston, Mass Veterans Administration Hospital Providence R I
167 Eastern Maine General Hospital Bangor Maine Central Maine General Hospital Lewiston Maine Burbank Hospital Fitchburg Mass
168 Boston Floating Hospital Boston Mass
169 Boston City Hospital St Margaret s Hospital Boston Mass
170 Sturdy Memorial Hospital Attleboro Mass Fall River General Hospital Fall River Mass
171 Pittsfield General Hospital Pittsfield Mass
172 Wesson Maternity Hospital Springfield Mass
173 St Joseph Mercy Hospital, Ann Arbor, Mich Mercy Hospital Benton Harbor, Mich McLaren General Hospital, Flint Mich Midland Hospital Midland Mich Saginaw General Hospital Saginaw Mich Beyer Memorial Hospital Ypsilanti Mich
174 Herman Kiefer Hospital Detroit, Mich , Wayne County General Hospital and Infirmary, Eloise Mich
175 Children s Hospital, Receiving Hospital Detroit Mich
176 St Joseph s Retreat Dearborn Mich , Wayne County General Hospital and Infirmary, Eloise Mich
177 Herman Kiefer Hospital, Detroit Mich
178 Children s Hospital Detroit, Mich
179 Children s Hospital Lafayette Clinic, Detroit Mich
180 Hurley Hospital, Flint Mich
181 Ferguson Droste Ferguson Hospital Grand Rapids Mich
182 Children s Hospital Receiving Hospital Detroit, Mich Wayne County General Hospital Eloise Mich
183 Ingham Chest Hospital Lansing Mich
184 Pontiac State Hospital Pontiac, Mich
185 Miller Memorial Hospital Duluth Minn
186 St Barnabas Hospital Minneapolis Minn
187 Anoka State Hospital Anoka Minn Children s Hospital St Paul Minn
188 Children s Hospital Gillette State Hospital for Crippled Children St Paul Minn
189 North Memorial Hospital Robbinsdale Minn Children s Hospital Gillette State Hospital for Crippled Children, St Paul Minn
190 Children s Hospital St Paul Minn
191 University of Kansas Medical Center Kansas City Mo
192 Children s Mercy Hospital, Kansas City Mo
193 Children's Mercy Hospital, Kansas City General Hospital Kansas City Mo
194 St Louis City Hospital, St Louis Mo
195 St Louis Children s Hospital St Louis Mo
196 St Louis County Hospital Clayton, Mo St Louis Maternity Hospital St Louis Mo
197 Children s Memorial Hospital, Douglas County Hospital Omaha, Neb
198 Douglas County Hospital Omaha Neb
199 Children s Memorial Hospital Omaha Neb
200 Children s Seashore Home Atlantic City, N J Clyde Fish Memorial Hospital Northfield N J Betty Bacharach Home for Crippled Children Longport N J
201 St Elizabeth Hospital Elizabeth, N J , St Peter s General Hospital New Brunswick, N J
202 Homer G Phillips Hospital, St Louis Mo
203 Margaret Hague Maternity Hospital Jersey City, N J
204 St Michael s Hospital Newark N J
205 Babies Hospital Newark N J
206 Roosevelt Hospital for Chest Diseases Metuchen N J
207 Hackensack Hospital Hackensack N J Passaic General Hospital Passaic N J Nathan and Miriam Barnert Memorial Hospital Paterson N J Perth Amboy General Hospital, Perth Amboy, N J
208 A N Brady Hospital Albany N Y
209 Children s Hospital, Buffalo N Y
210 Georgetown University Hospital Washington D C
211 City Hospital of Elmhurst, Elmhurst N Y
212 Mt Sinai Hospital, New York City
213 Knickerbocker Hospital New York City
214 French Hospital New York City
215 Jewish Hospital Brooklyn N Y
216 Lincoln Hospital, New York City

217 Hunterdon Medical Center Flemington N J
218 St Catherine s Hospital Brooklyn N Y
219 Staten Island Hospital St Vincent s Hospital Staten Island, N Y
220 Strong Memorial Hospital Rochester N Y
221 Veterans Administration Hospital Batavia N Y Genesee Hospital Highland Hospital Rochester General Hospital Rochester State Hospital Rochester N Y
222 Homer Folks Tuberculosis Hospital Oneonta N Y
223 Veteran Administration Hospital Durham N C
224 Children s Hospital Akron Ohio
225 Children s Hospital Cincinnati Ohio
226 Daniel Drake Memorial Hospital Dunham Hospital Cincinnati Ohio
227 Cleveland Metropolitan General Hospital St Alexis Hospital Cleveland Ohio
228 St Vincent s Charity Hospital Cleveland Ohio
229 St Ann s Hospital Cleveland Ohio
230 Children s Hospital Columbus Ohio
231 Children s Hospital Columbus Psychiatric Institute and Hospital Ohio Tuberculosis Hospital Columbus Ohio
232 Children s Hospital Columbus Ohio
233 Cleveland Clinic Foundation Hospital Cleveland Ohio
234 Fort Hamilton Hospital Hamilton Ohio
235 Lima State Hospital Lima Ohio
236 St Vincent s Charity Hospital Cleveland Ohio
237 Children s Hospital Toledo Ohio
238 Maumee Valley Hospital Toledo State and Receiving Hospital William Roche Memorial Hospital Toledo Ohio
239 Mahoning Tuberculosis Sanatorium Woodside Receiving Hospital Youngstown Ohio
240 University of Oklahoma Hospitals Oklahoma City Okla
241 Veterans Administration Hospital Oklahoma City Okla
242 Children Medical Center Tulsa Okla
243 St Vincent s Hospital Portland Oreg
244 Mercy Hospital City Hospital New York City Charles V Chapin Hospital Providence R I
245 Springfield Hospital Wesson Maternity Hospital Springfield Ma
246 Hospital of the University of Pennsylvania Philadelphia Pa
247 Germantown Dispensary and Hospital Philadelphia Psychiatric Hospital Philadelphia Pa
248 St Christopher s Hospital for Children Philadelphia Pa
249 Children s Hospital Philadelphia Pa
250 Providence Lying In Hospital Providence R I
251 Our Lady of Fatima Hospital Providence R I
252 St Francis Xavier Hospital Charleston S C
253 T C Thompson Children s Hospital Chattanooga Tenn
254 University of Tennessee Memorial Research Center and Hospital Knoxville Tenn
255 University of Tennessee Memorial Research Center and Hospital East Tennessee Children s Hospital Knoxville Tenn
256 Le Bonheur Children s Hospital Memphis Tenn
257 Baptist Memorial Hospital Campbell Clinic and Hospital Le Bonheur Children s Hospital Methodist Hospital St Joseph s Hospital Veterans Administration Hospital (Kennedy) West Tennessee Tuberculosis Hospital Memphis Tenn
258 John Gaston Hospital Le Bonheur Hospital West Tennessee Tuberculosis Hospital Memphis Tenn
259 Nashville General Hospital Nashville Tenn
260 Veterans Administration Hospital Nashville Tenn
261 Driscoll Foundation Children s Hospital Corpus Christi Tex
262 Children s Medical Center Dallas Tex
263 Children s Medical Center Parkland Memorial Hospital Dallas Tex
264 Texas Children s Hospital Houston Tex
265 Jefferson Davis Hospital Texas Children s Hospital St Luke s Episcopal Hospital Houston Tex
267 Primary Children s Hospital Salt Lake City Utah
268 Salt Lake County General Hospital Salt Lake City Utah
269 Veterans Administration Hospital Salt Lake City Utah
270 Blue Ridge Sanatorium Charlottesville Va Lynchburg General Hospital Lynchburg Va Kings Daughters Hospital Staunton Va
271 DePaul Hospital Norfolk Va U S Naval Hospital Portsmouth Va
272 Medical College of Virginia Hospital Division Tucker Hospital Richmond Va
273 Medical College of Virginia Hospital Division Richmond Va
274 Madigan Army Hospital Tacoma Wash
275 Children s Orthopedic Hospital Seattle Wash
276 Fort Defiance Indian Hospital Fort Defiance Ariz U S Army Hospital Fort Lawton Wash
277 Booth Memorial Hospital Fairchild Air Force Base Hospital Spokane Wash
278 Mary Bridge Children s Hospital Tacoma Wash
279 Salvation Army Maternity Hospital Charleston W Va
280 Veterans Administration Hospital Huntington W Va
281 Ohio Valley General Hospital Wheeling W Va
282 Milwaukee Children s Hospital Milwaukee Wis
283 Milwaukee County Hospital Milwaukee Wis
284 Milwaukee Hospital St Joseph s Hospital Martha Washington Home Milwaukee Wis
285 Milwaukee Children s Hospital Martha Washington Home Milwaukee Wis
286 Johnston Municipal Hospital Milwaukee County Hospital Milwaukee Children s Hospital Milwaukee Wis
287 Milwaukee County General Hospital St Michael Hospital Milwaukee Wis
288 Children s Hospital Elizabeth Steel Magee Hospital Eye and Ear Hospital Presbyterian Hospital-Woman s Hospital Pittsburgh Pa
289 Memorial Center for Cancer and Allied Diseases New York City
290 University Hospital New York City
291 Milwaukee Children s Hospital Emergency Unit of Milwaukee County General Hospital Milwaukee Wis
292 Escambia General Hospital Pensacola Fla

APPROVED INTERNSHIPS BY TYPE OF SERVICE

ROTATING GENERAL

Number of Approved Programs 805

FEDERAL

UNITED STATES ARMY

Letterman General Hospital	San Francisco
Fitzsimons General Hospital	Denver Colo
Walter Reed General Hospital	Washington D C
Martin Army Hospital	Fort Benning Ga
Tripler Army Hospital	Honolulu Hawaii
Ireland Army Hospital	Fort Knox Ky
Womack Army Hospital	Fort Bragg N C
William Beaumont General Hospital	El Paso Texas
Brooke General Hospital Ft Sam Houston	San Antonio Texas
Madigan General Hospital	Tacoma Wash

UNITED STATES AIR FORCE

U S Air Force Hospital	San Antonio Texas

UNITED STATES NAVY

U S Naval Hospital	Oakland Calif
U S Naval Hospital	Oceanside Calif
U S Naval Hospital	San Diego Calif
U S Naval Hospital	Jacksonville Fla
U S Naval Hospital	Pensacola Fla
U S Naval Hospital	Great Lakes Ill
U S Naval Hospital	Bethesda Md
U S Naval Hospital	Chelsea Mass
U S Naval Hospital St Albans	New York City
U S Naval Hospital	Philadelphia
U S Naval Hospital	Newport R I
U S Naval Hospital	Charleston S C
U S Naval Hospital	Portsmouth Va
U S Naval Hospital	Bremerton Wash

UNITED STATES PUBLIC HEALTH SERVICE

U S Public Health Service Hospital	San Francisco
U S Public Health Service Hospital	New Orleans
U S Public Health Service Hospital	Baltimore
U S Public Health Service Hospital	Boston
U S Public Health Service Hospital Staten Island	New York City
U S Public Health Service Hospital	Norfolk Va
U S Public Health Service Hospital	Seattle

DEPARTMENT OF HEALTH EDUCATION AND WELFARE

Freedmen s Hospital	Washington D C
St Elizabeth s Hospital	Washington D C

VETERANS ADMINISTRATION

Veterans Admin Hospital	Los Angeles
Veterans Admin Hospital	Salt Lake City

OTHER FEDERAL

Gorgas Hospital	Balboa Heights Canal Zone

NONFEDERAL

Birmingham Baptist Hospitals	Birmingham Ala
Carraway Methodist Hospital	Birmingham Ala
St Vincent Hospital	Birmingham Ala
University Hospital and Hillman Clinic	Birmingham Ala
Lloyd Noland Hospital	Fairfield Ala
Mobile General Hospital	Mobile Ala
Good Samaritan Hospital	Phoenix Ariz
Maricopa County General Hospital	Phoenix Ariz
St Joseph s Hospital	Phoenix Ariz
St Mary s Hospital	Tucson Ariz
Tucson Medical Center	Tucson Ariz
Arkansas Baptist Hospital	Little Rock Ark
St Vincent Infirmary	Little Rock Ark
University Hospital	Little Rock Ark
General Hospital of Riverside County	Arlington Calif
Kern County General Hospital	Bakersfield Calif
Herrick Memorial Hospital	Berkeley Calif
General Hospital of Fresno County	Fresno Calif
Glendale Sanitarium and Hospital	Glendale Calif
Loma Linda Sanitarium and Hospital	Loma Linda Calif
Memorial Hospital of Long Beach	Long Beach Calif
St Mary s Long Beach Hospital	Long Beach Calif
California Hospital	Los Angeles
Cedars of Lebanon Hospital	Los Angeles
Hospital of the Good Samaritan	Los Angeles
Los Angeles County Hospital	Los Angeles
Presbyterian Hospital-Olmsted Memorial	
Queen of Angels Hospital	
St Vincent s Hospital	

NONFEDERAL—Continued

Santa Fe Coast Lines Hospital	Los Angeles
White Memorial Hospital	Los Angeles
Highland Alameda County Hospital	Oakland Calif
Orange County General Hospital	Orange Calif
Collis P and Howard Huntington Memorial Hospital	Pasadena Calif
Sacramento County Hospital	Sacramento Calif
San Bernardino County Charity Hospital	San Bernardino Calif
Mercy Hospital	San Diego Calif
San Diego County General Hospital	San Diego Calif
Children's Hospital	San Francisco
Franklin Hospital	San Francisco
French Hospital	San Francisco
Kaiser Foundation Hospital	San Francisco
Mary's Help Hospital	San Francisco
Mount Zion Hospital	San Francisco
Presbyterian Medical Center	San Francisco
St Joseph's Hospital	San Francisco
St Luke's Hospital	San Francisco
St Mary's Hospital	San Francisco
San Francisco General Hospital	San Francisco
Southern Pacific General Hospital	San Francisco
Santa Clara County Hospital	San Jose Calif
Santa Barbara Cottage Hospital	Santa Barbara Calif
Santa Monica Hospital	Santa Monica Calif
San Joaquin General Hospital	Stockton Calif
Harbor General Hospital	Torrance Calif
Penrose Hospital	Colorado Springs Colo
Colorado General Hospital	Denver
Denver General Hospital	Denver
General Rose Memorial Hospital	Denver
Mercy Hospital	Denver
Porter Sanitarium and Hospital	Denver
Presbyterian Hospital	Denver
St Anthony Hospital	Denver
St Joseph's Hospital	Denver
St Luke's Hospital	Denver
Weld County General Hospital	Greeley Colo
St Mary-Corwin Hospital	Pueblo Colo
Bridgeport Hospital	Bridgeport Conn
St Vincent's Hospital	Bridgeport Conn
Bristol Hospital	Bristol Conn
Danbury Hospital	Danbury Conn
Griffin Hospital	Derby Conn
Greenwich Hospital	Greenwich Conn
Hartford Hospital	Hartford Conn
Hartford Municipal Hospital and Health Center	Hartford Conn
Mount Sinai Hospital	Hartford Conn
St Francis Hospital	Hartford Conn
Manchester Memorial Hospital	Manchester, Conn
Meriden Hospital	Meriden Conn
Middlesex Memorial Hospital	Middletown Conn
New Britain General Hospital	New Britain, Conn
Hospital of St Raphael	New Haven, Conn
Lawrence and Memorial Hospitals	New London, Conn
Norwalk Hospital	Norwalk Conn
Stamford Hospital	Stamford, Conn
St Mary's Hospital	Waterbury Conn
Waterbury Hospital	Waterbury Conn
Delaware Hospital	Wilmington Del
Memorial Hospital	Wilmington Del
Wilmington General Hospital	Wilmington Del
District of Columbia General Hospital	Washington, D C
Doctors Hospital	Washington, D C
George Washington University Hospital	Washington, D C
Providence Hospital	Washington, D C
Sibley Memorial Hospital	Washington, D C
Washington Hospital Center	Washington, D C
Washington Sanitarium and Hospital	Washington D C
Baptist Memorial Hospital	Jacksonville Fla
Brewster Methodist Hospital	Jacksonville, Fla
Duval Medical Center	Jacksonville Fla
St Luke's Hospital	Jacksonville Fla
St Vincent's Hospital	Jacksonville Fla
Jackson Memorial Hospital	Miami, Fla
Mount Sinai Hospital of Greater Miami	Miami Beach Fla
St Francis Hospital	Miami Beach, Fla
Orange Memorial Hospital	Orlando, Fla
Baptist Hospital	Pensacola, Fla
Sacred Heart Hospital	Pensacola Fla
Mound Park Hospital	St Petersburg, Fla
Tampa General Hospital	Tampa Fla
Good Samaritan Hospital	West Palm Beach Fla
St Mary's Hospital	West Palm Beach Fla
Athens General Hospital	Athens, Ga
St Mary's Hospital	Athens Ga
Crawford W Long Memorial Hospital	Atlanta Ga
Georgia Baptist Hospital	Atlanta Ga
Grady Memorial Hospital	Atlanta Ga
Piedmont Hospital	Atlanta Ga
St Joseph's Infirmary	Atlanta, Ga
University Hospital	Augusta, Ga
Medical Center	Columbus Ga
Macon Hospital	Macon, Ga
Floyd Hospital	Rome Ga
Memorial Hospital of Chatham County	Savannah Ga
Kuakini Hospital	Honolulu, Hawaii
Queen's Hospital	Honolulu, Hawaii
St Francis Hospital	Honolulu Hawaii
MacNeal Memorial Hospital	Berwyn, Ill
St Francis Hospital	Blue Island Ill
American Hospital	Chicago
Augustana Hospital	Chicago
Chicago Wesley Memorial Hospital	Chicago
Columbus Hospital	Chicago
Cook County Hospital	Chicago
Edgewater Hospital	Chicago

NONFEDERAL—Continued

Englewood Hospital	Chicago
Evangelical Hospital	Chicago
Grant Hospital	Chicago
Hospital of St Anthony de Padua	Chicago
Illinois Central Hospital	Chicago
Illinois Masonic Hospital	Chicago
Jackson Park Hospital	Chicago
Loretto Hospital	Chicago
Lutheran Deaconess Hospital	Chicago
Mercy Hospital	Chicago
Michael Reese Hospital	Chicago
Mount Sinai Hospital	Chicago
Norwegian-American Hospital	Chicago
Passavant Memorial Hospital	Chicago
Presbyterian-St Luke's Hospital	Chicago
Provident Hospital	Chicago
Ravenswood Hospital	Chicago
Resurrection Hospital	Chicago
St Anne's Hospital	Chicago
St Bernard's Hospital	Chicago
St Elizabeth's Hospital	Chicago
St Joseph Hospital	Chicago
St Mary of Nazareth Hospital	Chicago
South Chicago Community Hospital	Chicago
South Shore Hospital	Chicago
Swedish Covenant Hospital	Chicago
University of Chicago Clinics	Chicago
University of Illinois Research and Educational Hospitals	Chicago
Woodlawn Hospital	Chicago
Decatur and Macon County Hospital	Decatur Ill
Evanston Hospital	Evanston, Ill
St Francis Hospital	Evanston Ill
Little Company of Mary Hospital	Evergreen Park Ill
Hinsdale Sanitarium and Hospital	Hinsdale Ill
Oak Park Hospital	Oak Park Ill
West Suburban Hospital	Oak Park Ill
Methodist Hospital of Central Illinois	Peoria Ill
St Francis Hospital	Peoria Ill
Rockford Memorial Hospital	Rockford Ill
St Anthony Hospital	Rockford Ill
Swedish American Hospital	Rockford Ill
St Catherine Hospital	East Chicago, Ind
St Mary's Hospital	Evansville, Ind
Lutheran Hospital	Fort Wayne Ind
Methodist Hospital	Gary Ind
St Mary Mercy Hospital	Gary Ind
St Margaret Hospital	Hammond Ind
Indiana University Medical Center	Indianapolis
Marion County General Hospital	Indianapolis
Methodist Hospital	Indianapolis
St Vincent's Hospital	Indianapolis
St Elizabeth Hospital	Lafayette Ind
Ball Memorial Hospital	Muncie Ind
Memorial Hospital	South Bend Ind
St Joseph's Hospital	South Bend Ind
Mercy Hospital	Cedar Rapids Iowa
St Luke's Methodist Hospital	Cedar Rapids Iowa
Broadlawns Polk County Hospital	Des Moines Iowa
Iowa Lutheran Hospital	Des Moines Iowa
Iowa Methodist Hospital	Des Moines Iowa
Mercy Hospital	Des Moines Iowa
State University of Iowa Hospitals	Iowa City Iowa
Bethany Hospital	Kansas City Kan
St Margaret's Hospital	Kansas City Kan
University of Kansas Medical Center	Kansas City Kan
St Francis Hospital	Wichita Kan
Wesley Hospital	Wichita Kan
Wichita-St Joseph Hospital	Wichita, Kan
St Elizabeth Hospital	Covington Ky
Good Samaritan Hospital	Lexington Ky
St Joseph Hospital	Lexington Ky
Kentucky Baptist Hospital	Louisville Ky
Louisville General Hospital	Louisville Ky
Norton Memorial Infirmary	Louisville Ky
St Anthony Hospital	Louisville Ky
St Joseph Infirmary	Louisville Ky
SS Mary and Elizabeth Hospital	Louisville Ky
Charity Hospital of Louisiana	New Orleans
Hotel Dieu	New Orleans
Mercy Hospital	New Orleans
Southern Baptist Hospital	New Orleans
Touro Infirmary	New Orleans
Confederate Memorial Medical Center	Shreveport, La
Doctors Hospital and Research Foundation	Shreveport La
Highland Hospital	Shreveport La
F E Schumpert Memorial Sanitarium	Shreveport La
Eastern Maine General Hospital	Bangor Maine
Central Maine General Hospital	Lewiston Maine
Maine Medical Center	Portland Maine
Baltimore City Hospitals	Baltimore
Bon Secours Hospital	Baltimore
Church Home and Hospital	Baltimore
Franklin Square Hospital	Baltimore
Lutheran Hospital	Baltimore
Maryland General Hospital	Baltimore
Mercy Hospital	Baltimore
Provident Hospital	Baltimore
St Agnes Hospital	Baltimore
St Joseph's Hospital	Baltimore
Sinai Hospital	Baltimore
South Baltimore General Hospital	Baltimore
Union Memorial Hospital	Baltimore
University Hospital	Baltimore
Suburban Hospital	Bethesda Md
Prince George's General Hospital	Cheverly Md
Washington County Hospital	Hagerstown Md

NONFEDERAL—Continued

Beverly Hospital	Beverly	Mass
Carney Hospital	Boston	
New England Hospital	Boston	
St Elizabeth's Hospital	Boston	
Brockton Hospital	Brockton	Mass
Cambridge City Hospital	Cambridge	Mass
Truesdale Hospital	Fall River	Mass
Union Hospital	Fall River	Mass
Framingham Union Hospital	Framingham	Mass
Holyoke Hospital	Holyoke	Mass
Providence Hospital	Holyoke	Mass
Lawrence General Hospital	Lawrence	Mass
Lowell General Hospital	Lowell	Mass
St John's Hospital	Lowell	Mass
St Joseph's Hospital	Lowell	Mass
Lynn Hospital	Lynn	Mass
Malden Hospital	Malden	Mass
Bon Secours Hospital	Methuen	Mass
St Luke's Hospital	New Bedford	Mass
Newton Wellesley Hospital	Newton Lower Falls	Mass
Pittsfield General Hospital	Pittsfield	Mass
St Luke's Hospital	Pittsfield	Mass
Quincy City Hospital	Quincy	Mass
Salem Hospital	Salem	Mass
Mercy Hospital	Springfield	Mass
Springfield Hospital	Springfield	Mass
Wesson Memorial Hospital	Springfield	Mass.
Waltham Hospital	Waltham	Mass
Memorial Hospital	Worcester	Mass
St Vincent Hospital	Worcester	Mass
Worcester City Hospital	Worcester	Mass
St Joseph Mercy Hospital	Ann Arbor	Mich
University Hospital	Ann Arbor	Mich
Community Hospital	Battle Creek	Mich
Leila Y Post Montgomery Hospital	Battle Creek	Mich
Mercy Hospital	Benton Harbor	Mich
Oakwood Hospital	Dearborn	Mich
Detroit Memorial Hospital	Detroit	
Evangelical Deaconess Hospital	Detroit	
Grace Hospital	Detroit	
Harper Hospital	Detroit	
Henry Ford Hospital	Detroit	
Mount Carmel Mercy Hospital	Detroit	
Providence Hospital	Detroit	
Receiving Hospital	Detroit	
St John Hospital	Detroit	
St Joseph Mercy Hospital	Detroit	
Sinai Hospital	Detroit	
Women's Hospital	Detroit	
Wayne County General Hospital and Infirmary	Eloise	Mich
Hurley Hospital	Flint	Mich
McLaren General Hospital	Flint	Mich
St Joseph Hospital	Flint	Mich
Blodgett Memorial Hospital	Grand Rapids	Mich
Butterworth Hospital	Grand Rapids	Mich
St Mary's Hospital	Grand Rapids	Mich
Bon Secours Hospital	Grosse Pointe	Mich
Highland Park General Hospital	Highland Park	Mich
Borgess Hospital	Kalamazoo	Mich
Bronson Methodist Hospital	Kalamazoo	Mich
Edward W Sparrow Hospital	Lansing	Mich
St Lawrence Hospital	Lansing	Mich
Midland Hospital	Midland	Mich
Hackley Hospital	Muskegon	Mich
Pontiac General Hospital	Pontiac	Mich
St Joseph Mercy Hospital	Pontiac	Mich
William Beaumont Hospital	Royal Oak	Mich
Saginaw General Hospital	Saginaw	Mich
St Luke's Hospital	Saginaw	Mich
St Mary's Hospital	Saginaw	Mich
James Decker Munson Hospital	Traverse City	Mich
St Luke's Hospital	Duluth	Minn
St Mary's Hospital	Duluth	Minn
Methodist Hospital	Minneapolis	
Minneapolis General Hospital	Minneapolis	
Mount Sinai Hospital	Minneapolis	
Northwestern Hospital	Minneapolis	
St Barnabas Hospital	Minneapolis	
St Mary's Hospital	Minneapolis	
Swedish Hospital	Minneapolis	
Ancker Hospital	St Paul	
Bethesda Lutheran Hospital	St Paul	
Charles T Miller Hospital	St Paul	
St Joseph's Hospital	St Paul	
St Luke's Hospital	St Paul	
Mississippi Baptist Hospital	Jackson	Miss
University Hospital	Jackson	Miss
St Louis County Hospital	Clayton	Mo
Kansas City General Hospital	Kansas City	Mo
Menorah Medical Center	Kansas City	Mo
Research Hospital	Kansas City	Mo
St Joseph Hospital	Kansas City	Mo
St Luke's Hospital	Kansas City	Mo
St Mary's Hospital	Kansas City	Mo
Trinity Lutheran Hospital	Kansas City	Mo
Missouri Methodist Hospital	St Joseph	Mo
St Joseph's Hospital	St Joseph	Mo
Deaconess Hospital	St Louis	
De Paul Hospital	St Louis	
Homer G Phillips Hospital	St Louis	
Jewish Hospital	St Louis	
Missouri Baptist Hospital	St Louis	
St John's Hospital	St Louis	
St Louis City Hospital	St Louis	
St Luke's Hospital	St Louis	
St Mary's Group of Hospitals of St Louis University	St Louis	

NONFEDERAL—Continued

St James Hospital	Butte	Mont
Bryan Memorial Hospital	Lincoln	Neb
Lincoln General Hospital	Lincoln	Neb
St Elizabeth Hospital	Lincoln	Neb
Bishop Clarkson Memorial Hospital	Omaha	
Creighton Memorial St Joseph Hospital	Omaha	
Immanuel Hospital	Omaha	
Nebraska Methodist Hospital	Omaha	
St Catherine's Hospital	Omaha	
University of Nebraska Hospital	Omaha	
Mary Hitchcock Memorial Hospital	Hanover	N H
Atlantic City Hospital	Atlantic City	N J
Bayonne Hospital and Dispensary	Bayonne	N J
Cooper Hospital	Camden	N J
Our Lady of Lourdes Hospital	Camden	N J
West Jersey Hospital	Camden	N J
East Orange General Hospital	East Orange	N J
Alexian Brothers Hospital	Elizabeth	N J
Elizabeth General Hospital and Dispensary	Elizabeth	N J
St Elizabeth Hospital	Elizabeth	N J
Englewood Hospital	Englewood	N J
Hackensack Hospital	Hackensack	N J
St Mary's Hospital	Hoboken	N J
Christ Hospital	Jersey City	N J
Jersey City Hospital	Jersey City	N J
St Francis Hospital	Jersey City	N J
Monmouth Medical Center	Long Branch	N J
Mountainside Hospital	Montclair	N J
All Souls Hospital	Morristown	N J
Morristown Memorial Hospital	Morristown	N J
Firkin Memorial Hospital	Neptune	N J
Harrison S Martland Medical Center	Newark	N J
Newark Beth Israel Hospital	Newark	N J
Presbyterian Hospital	Newark	N J
St Barnabas Medical Center	Newark	N J
St Michael's Hospital	Newark	N J
Middlesex General Hospital	New Brunswick	N J
St Peter's General Hospital	New Brunswick	N J
Orange Memorial Hospital	Orange	N J
Bergen Pines County Hospital	Paramus	N J
Passaic General Hospital	Passaic	N J
St Mary's Hospital	Passaic	N J
Barnett Memorial Hospital	Paterson	N J
Paterson General Hospital	Paterson	N J
St Joseph Hospital	Paterson	N J
Perth Amboy General Hospital	Perth Amboy	N J
Muhlenberg Hospital	Plainfield	N J
Somerset Hospital	Somerville	N J
Overlook Hospital	Summit	N J
Holy Name Hospital	Teaneck	N J
Helene Fuld Hospital	Trenton	N J
Mercer Hospital	Trenton	N J
St Francis Hospital	Trenton	N J
Bernalillo County-Indian Hospital	Albuquerque	N M
Albany Hospital	Albany	N Y
Memorial Hospital	Albany	N Y
St Peter's Hospital	Albany	N Y
Binghamton General Hospital	Binghamton	N Y
Lawrence Hospital	Bronxville	N Y
Buffalo General Hospital	Buffalo	
Deaconess Hospital	Buffalo	
Edward J Meyer Memorial Hospital	Buffalo	
Mercy Hospital	Buffalo	
Millard Fillmore Hospital	Buffalo	
Sisters of Charity Hospitals	Buffalo	
Mary Imogene Bassett Hospital	Cooperstown	N Y
Arnot Ogden Memorial Hospital	Elmira	N Y
St Joseph's Hospital	Elmira	N Y
Community Hospital	Glen Cove	N Y
Glens Falls Hospital	Glens Falls	N Y
Meadowbrook Hospital	Hempstead	N Y
Charles S Wilson Memorial Hospital	Johnson City	N Y
Kenmore Mercy Hospital	Kenmore	N Y
Nassau Hospital	Mineola	N Y
Northern Westchester Hospital	Mt Kisco	N Y
Mount Vernon Hospital	Mount Vernon	N Y
St Luke's Hospital	Newburgh	N Y
New Rochelle Hospital	New Rochelle	N Y
Bellevue Hospital Center	New York City	
Beth El Hospital Brooklyn	New York City	
Beth Israel Hospital	New York City	
Booth Memorial Hospital Flushing	New York City	
Bronx Hospital	New York City	
Brooklyn Hospital Brooklyn	New York City	
City Hospital at Elmhurst	New York City	
Columbus Hospital	New York City	
Coney Island Hospital Brooklyn	New York City	
Cumberland Hospital Brooklyn	New York City	
Flushing Hospital and Dispensary Flushing	New York City	
Fordham Hospital	New York City	
French Hospital	New York City	
Grand Central Hospital	New York City	
Greenpoint Hospital Brooklyn	New York City	
Harlem Hospital	New York City	
Hospital for Joint Diseases	New York City	
Jamaica Hospital Jamaica	New York City	
Jewish Hospital Brooklyn	New York City	
Jewish Memorial Hospital	New York City	
Kings County Hospital Center Brooklyn	New York City	
Knickerbocker Hospital	New York City	
Lebanon Hospital	New York City	
Lenox Hill Hospital	New York City	
Lincoln Hospital	New York City	
Long Island College Hospital Brooklyn	New York City	
Long Island Jewish Hospital New Hyde Park	New York City	
Lutheran Hospital Brooklyn	New York City	

NONFEDERAL—Continued

Lutheran Medical Center Brooklyn	New York City
Maimonides Hospital Brooklyn	New York City
Mary Immaculate Hospital Jamaica	New York City
Methodist Hospital Brooklyn	New York City
Misericordia Hospital	New York City
Morrisania City Hospital	New York City
Mother Cabrini Memorial Hospital	New York City
Mount Sinai Hospital	New York City
New York Infirmary	New York City
New York Polyclinic Medical School and Hospital	New York City
Prospect Heights Hospital Brooklyn	New York City
Queens Hospital Center Jamaica	New York City
St Catherine's Hospital Brooklyn	New York City
St Clare's Hospital	New York City
St Francis Hospital	New York City
St John's Episcopal Hospital Brooklyn	New York City
St John's Long Island City Hospital Long Island City	New York City
St Mary's Hospital Brooklyn	New York City
St Vincent's Hospital Staten Island	New York City
St Vincent's Hospital	New York City
Staten Island Hospital Staten Island	New York City
Sydenham Hospital	New York City
Unity Hospital Brooklyn	New York City
Wyckoff Heights Hospital Brooklyn	New York City
Mount St Mary's Hospital	Niagara Falls, N Y
Niagara Falls Memorial Hospital	Niagara Falls N Y
United Hospital	Port Chester N Y
St Francis Hospital	Poughkeepsie N Y
Vassar Brothers Hospital	Poughkeepsie, N Y
Genesee Hospital	Rochester N Y
Highland Hospital	Rochester N Y
Rochester General Hospital	Rochester N Y
St Mary's Hospital	Rochester, N Y
Ellis Hospital	Schenectady, N Y
St Clare's Hospital	Schenectady N Y
St Joseph's Hospital	Syracuse N Y
State University of New York Upstate Medical Center Hospitals	Syracuse N Y
Leonard Hospital	Troy N Y
St Mary's Hospital	Troy, N Y
Samaritan Hospital	Troy N Y
White Plains Hospital	White Plains N Y
St John's Riverside Hospital	Yonkers N Y
St Joseph's Hospital	Yonkers N Y
Yonkers General Hospital	Yonkers N Y
Memorial Mission Hospital of Western North Carolina	Asheville N C
Watts Hospital	Durham N C
Moses H Cone Memorial Hospital	Greensboro, N C
Rex Hospital	Raleigh N C
James Walker Memorial Hospital	Wilmington N C
City Memorial Hospital	Winston-Salem N C
Kate Bitting Reynolds Memorial Hospital	Winston-Salem N C
St John's Hospital	Fargo N D
St Luke's Hospital	Fargo N D
Akron City Hospital	Akron, Ohio
Akron General Hospital	Akron Ohio
St Thomas Hospital	Akron Ohio
Barberton Citizens Hospital	Barberton Ohio
Aultman Hospital	Canton Ohio
Mercy Hospital	Canton Ohio
Bethesda Hospital	Cincinnati
Christ Hospital	Cincinnati
Cincinnati General Hospital	Cincinnati
Good Samaritan Hospital	Cincinnati
Jewish Hospital	Cincinnati
St Mary's Hospital	Cincinnati
Cleveland Clinic Hospital	Cleveland
Cleveland Metropolitan General Hospital	Cleveland
Evangelical Deaconess Hospital	Cleveland
Fairview Park Hospital	Cleveland
Huron Road Hospital	Cleveland
Lutheran Hospital	Cleveland
Mount Sinai Hospital	Cleveland
St Alexis Hospital	Cleveland
St John's Hospital	Cleveland
St Luke's Hospital	Cleveland
St Vincent Charity Hospital	Cleveland
University Hospitals	Cleveland
Doctors Hospital	Cleveland Heights Ohio
Grant Hospital	Columbus Ohio
Mount Carmel Hospital	Columbus, Ohio
University Hospitals	Columbus Ohio
White Cross Hospital	Columbus Ohio
Good Samaritan Hospital	Dayton Ohio
Miami Valley Hospital	Dayton Ohio
St Elizabeth Hospital	Dayton Ohio
Elyria Memorial Hospital	Elyria Ohio
Euclid-Glenville Hospital	Euclid Ohio
Marymount Hospital	Garfield Heights Ohio
Mercy Hospital	Hamilton Ohio
Lakewood Hospital	Lakewood Ohio
Lima Memorial Hospital	Lima Ohio
St Rita's Hospital	Lima, Ohio
St Joseph Hospital	Lorain Ohio
Mercy Hospital	Springfield Ohio
Springfield City Hospital	Springfield Ohio
Ohio Valley Hospital	Steubenville Ohio
Flower Hospital	Toledo Ohio
Maumee Valley Hospital	Toledo Ohio
Mercy Hospital	Toledo, Ohio
Riverside Hospital	Toledo, Ohio
St Charles Hospital	Toledo Ohio
St Vincent's Hospital	Toledo, Ohio
Toledo Hospital	Toledo Ohio
Trumbull Memorial Hospital	Warren Ohio
St Elizabeth Hospital	Youngstown Ohio

NONFEDERAL—Continued

Youngstown Hospital	Youngstown Ohio
Mercy Hospital–Oklahoma City General	Oklahoma City
St Anthony Hospital	Oklahoma City
University Hospitals	Oklahoma City
Wesley Hospital	Oklahoma City
Hillcrest Medical Center	Oklahoma City
St John's Hospital	Tulsa Okla
Sacred Heart General Hospital	Tulsa Okla
Emanuel Hospital	Eugene Ore
Good Samaritan Hospital	Portland Ore
Portland Sanitarium and Hospital	Portland Ore
Providence Hospital	Portland Ore
St Vincent Hospital	Portland Ore
University of Oregon Medical School Hospitals and Clinics	Portland Ore
Abington Memorial Hospital	Abington Pa
Allentown Hospital	Allentown Pa
Sacred Heart Hospital	Allentown Pa
Altoona Hospital	Altoona Pa
Mercy Hospital	Altoona Pa
St Luke's Hospital	Altoona Pa
Lower Bucks County Hospital	Bethlehem Pa
Bryn Mawr Hospital	Bristol Pa
Butler County Memorial Hospital	Bryn Mawr Pa
Chester Hospital	Butler Pa
George F Geisinger Memorial Hospital	Chester Pa
Thomas M Fitzgerald–Mercy Hospital	Danville Pa
Easton Hospital	Darby Pa
Hamot Hospital	Easton Pa
St Vincent Hospital	Erie Pa
Westmoreland Hospital	Erie Pa
Harrisburg Hospital	Greensburg Pa
Harrisburg Polyclinic Hospital	Harrisburg Pa
Conemaugh Valley Memorial Hospital	Harrisburg, Pa
Mercy Hospital	Johnstown Pa
Lancaster General Hospital	Johnstown Pa
St Joseph Hospital	Lancaster Pa
McKeesport Hospital	Lancaster Pa
Allegheny Valley Hospital	McKeesport Pa
Montgomery Hospital	Natrona Heights Pa
Sacred Heart Hospital	Norristown Pa
Albert Einstein Medical Center	Norristown Pa
Chestnut Hill Hospital	Philadelphia
Episcopal Hospital	Philadelphia
Frankford Hospital	Philadelphia
Germantown Dispensary and Hospital	Philadelphia
Graduate Hospital of the University of Pennsylvania	Philadelphia
Hahnemann Medical College and Hospital	Philadelphia
Hospital of the University of Pennsylvania	Philadelphia
Jefferson Medical College Hospital	Philadelphia
Lankenau Hospital	Philadelphia
Memorial Hospital	Philadelphia
Mercy-Douglass Hospital	Philadelphia
Methodist Episcopal Hospital	Philadelphia
Misericordia Hospital	Philadelphia
Nazareth Hospital	Philadelphia
Northeastern Hospital	Philadelphia
Pennsylvania Hospital	Philadelphia
Philadelphia General Hospital	Philadelphia
Presbyterian Hospital	Philadelphia
St Agnes Hospital	Philadelphia
St Joseph's Hospital	Philadelphia
St Mary's Franciscan Hospital	Philadelphia
Woman's Hospital	Philadelphia
Allegheny General Hospital	Pittsburgh
Health Center Hospitals of the University of Pittsburgh School of Medicine	Pittsburgh
Mercy Hospital	Pittsburgh
Montefiore Hospital	Pittsburgh
Pittsburgh Hospital	Pittsburgh
St Francis General Hospital and Rehabilitation Institute	Pittsburgh
St Joseph's Hospital and Dispensary	Pittsburgh
St Margaret Memorial Hospital	Pittsburgh
Shadyside Hospital	Pittsburgh
South Side Hospital	Pittsburgh
Western Pennsylvania Hospital	Pittsburgh
Reading Hospital	Reading Pa
St Joseph's Hospital	Reading Pa
Robert Packer Hospital	Sayre Pa
Scranton State Hospital	Scranton Pa
Sewickley Valley Hospital	Sewickley Pa
Uniontown Hospital	Uniontown Pa
Washington Hospital	Washington Pa
Chester County Hospital	West Chester Pa
Mercy Hospital	Wilkes Barre Pa
Wilkes Barre General Hospital	Wilkes Barre Pa
Columbia Hospital	Wilkinsburg Pa
Williamsport Hospital	Williamsport Pa
York Hospital	York Pa
Aguadilla District Hospital	Aguadilla P R
Arecibo District Hospital	Arecibo P R
University Hospital	Caparra Heights P R
Fajardo District Hospital	Fajardo P R
Hospital de Damas	Ponce P R
Ponce District General Hospital	Ponce P R
Rio Piedras Municipal Hospital	Rio Piedras P R
Presbyterian Hospital	San Juan P R
San Juan City Hospital	San Juan P R
Newport Hospital	Newport R I
Memorial Hospital	Pawtucket R I
Miriam Hospital	Providence R I
Rhode Island Hospital	Providence R I
Roger Williams General Hospital	Providence R I
St Joseph's Hospital	Providence R I
Medical College South Carolina Teaching Hospitals	Charleston S C
Columbia Hospital	Columbia S C

NONFEDERAL—Continued

McLeod Infirmary	Florence	S C
Greenville General Hospital	Greenville	S C
Orangeburg Regional Hospital	Orangeburg	S C
Spartanburg-General Hospital	Spartanburg	S C
McKennan Hospital	Sioux Falls	S D
Sioux Valley Hospital	Sioux Falls	S D
Sacred Heart Hospital	Yankton	S D
Baroness Erlanger Hospital	Chattanooga	Tenn
Holston Valley Community Hospital	Kingsport	Tenn
East Tennessee Baptist Hospital	Knoxville	Tenn
Fort Sanders Presbyterian Hospital	Knoxville	Tenn
St Mary s Memorial Hospital	Knoxville	Tenn
University of Tennessee Memorial Research Center and Hospital	Knoxville	Tenn
Baptist Memorial Hospital	Memphis	Tenn
City of Memphis Hospitals (John Gaston Hospital)	Memphis	Tenn
Methodist Hospital	Memphis	Tenn
St Joseph Hospital	Memphis	Tenn
Baptist Hospital	Nashville	Tenn
George W Hubbard Hospital	Nashville	Tenn
Nashville General Hospital	Nashville	Tenn
St Thomas Hospital	Nashville	Tenn
Brackenridge Hospital	Austin	Tex
Memorial Hospital	Corpus Christi	Tex
Baylor University Medical Center	Dallas	Tex
Methodist Hospital	Dallas	Tex
Parkland Memorial Hospital	Dallas	Tex
St Paul Hospital	Dallas	Tex
Hotel Dieu Sisters Hospital	El Paso	Tex
R E Thomason General Hospital	El Paso	Tex
John Peter Smith Hospital	Fort Worth	Tex
St Joseph Hospital	Fort Worth	Tex
University of Texas Medical Branch Hospitals	Galveston	Tex
Hermann Hospital	Houston	Tex
Jefferson Davis Hospital	Houston	Tex
Memorial Hospital	Houston	Tex
Methodist Hospital	Houston	Tex
Baptist Memorial Hospital	San Antonio	Tex
Robert B Green Memorial Hospital	San Antonio	Tex
Santa Rosa Hospital	San Antonio	Tex
Scott and White Memorial Hospital	Temple	Tex
St Benedict s Hospital	Ogden	Utah
Thomas D Dee Memorial Hospital	Ogden	Utah
Dr W H Groves Latter Day Saints Hospital	Salt Lake City	
Holy Cross Hospital	Salt Lake City	
St Mark s Hospital	Salt Lake City	
Salt Lake County General Hospital	Salt Lake City	
DeGoesbriand Memorial Hospital	Burlington	Vt
Mary Fletcher Hospital	Burlington	Vt
Alexandria Hospital	Alexandria	Va
University of Virginia Hospital	Charlottesville	Va
Mary Immaculate Hospital	Newport News	Va
Riverside Hospital	Newport News	Va
DePaul Hospital	Norfolk	Va
Norfolk General Hospital	Norfolk	Va
Petersburg General Hospital	Petersburg	Va
Maryview Hospital	Portsmouth	Va
Johnston Willis Hospital	Richmond	Va
Medical College of Virginia Hospital Division	Richmond	Va
Richmond Memorial Hospital	Richmond	Va
Stuart Circle Hospital	Richmond	Va
Lewis Gale Hospital	Roanoke	Va
Roanoke Memorial Hospital	Roanoke	Va
Winchester Memorial Hospital	Winchester	Va
Doctors Hospital	Seattle	
King County Hospital (Harborview)	Seattle	
Providence Hospital	Seattle	
St Frances Xavier Cabrini Hospital	Seattle	
Seattle General Hospital	Seattle	
Swedish Hospital	Seattle	
University Hospital	Seattle	
Virginia Mason Hospital	Seattle	
Deaconess Hospital	Spokane	Wash
Sacred Heart Hospital	Spokane	Wash
St Luke s Hospital	Spokane	Wash
Mountain View General Hospital	Tacoma	Wash
St Joseph Hospital	Tacoma	Wash
Tacoma General Hospital	Tacoma	Wash
Charleston General Hospital	Charleston	W Va
Kanawha Valley Memorial Hospital	Charleston	W Va
Memorial Hospital	Charleston	W Va
Cabell Huntington Hospital	Huntington	W Va
St Mary s Hospital	Huntington	W Va
Camden Clark Memorial Hospital	Parkersburg	W Va
St Joseph s Hospital	Parkersburg	W Va
Weirton General Hospital	Weirton	W Va
Ohio Valley General Hospital	Wheeling	W Va
Wheeling Hospital	Wheeling	W Va
Luther Hospital	Eau Claire	Wis
Mercy Hospital	Janesville	Wis
La Crosse Lutheran Hospital	La Crosse	Wis
St Francis Hospital	La Crosse	Wis
Madison General Hospital	Madison	Wis
Methodist Hospital	Madison	Wis
St Mary s Hospital	Madison	Wis
St Joseph s Hospital	Marshfield	Wis
Evangelical Deaconess Hospital	Milwaukee	
Milwaukee County Hospital	Milwaukee	
Milwaukee Hospital	Milwaukee	
Misericordia Hospital	Milwaukee	
Mount Sinai Hospital	Milwaukee	
St Francis Hospital	Milwaukee	
St Joseph s Hospital	Milwaukee	
St Luke s Hospital	Milwaukee	
St Mary s Hospital	Milwaukee	
St Michael Hospital	Milwaukee	
St Mary s Hospital	Wausau	Wis

MIXED

Number of Approved Programs 34

University Hospital	Little Rock	Ark
French Hospital	San Francisco	
San Francisco General Hospital	San Francisco	
Georgetown University Hospital	Washington	D C
University of Kansas Medical Center	Kansas City	Kan
Baltimore City Hospitals	Baltimore	
Hospital for Women	Baltimore	
Mount Auburn Hospital	Cambridge	Mass
Jewish Hospital	St Louis	Mo
Lutheran Hospital	St Louis	Mo
Bellevue Hospital Center Division I—Medical—Columbia University	New York City	
Bellevue Hospital Center Division II—Medical—Cornell University	New York City	
Kings County Hospital Center Brooklyn	New York City	
Long Island College Hospital Brooklyn	New York City	
Maimonides Hospital Brooklyn	New York City	
Montefiore Hospital	New York City	
Roosevelt Hospital	New York City	
St Luke s Hospital	New York City	
Genesee Hospital	Rochester	N Y
Strong Memorial Rochester Municipal Hospitals	Rochester	N Y
General Hospital	Syracuse	N Y
St Joseph s Hospital	Syracuse	N Y
State University of New York Upstate Medical Center Hospitals	Syracuse	N Y
Grasslands Hospital	Valhalla	N Y
North Carolina Memorial Hospital	Chapel Hill	N C
Duke Hospital	Durham	N C
Watts Hospital	Durham	N C
North Carolina Baptist Hospital	Winston Salem	N C
Bethesda Hospital	Cincinnati	Ohio
University Hospitals	Oklahoma City	
St Thomas Hospital	Nashville	Tenn
University of Virginia Hospital	Charlottesville	Va
Jefferson Hospital	Roanoke	Va
University Hospital	Seattle	Wash
University Hospitals	Madison	Wis

STRAIGHT

Total Number of Approved Programs 248

INTERNAL MEDICINE

Number of Approved Programs 76

Veterans Admin Hospital	Los Angeles	
Veterans Admin Hospital	Atlanta	Ga
Veterans Admin Hospital	Oklahoma City	
Veterans Admin Hospital	Dallas	
Veterans Admin Hospital	Salt Lake City	
University Hospital and Hillman Clinic	Birmingham	Ala
University Hospital	Little Rock	Ark
Los Angeles County Hospital	Los Angeles	
University of California Hospital	Los Angeles	
Palo Alto Stanford Hospital Center	Palo Alto	Calif
University of California Hospitals	San Francisco	
Grace New Haven Community Hospital	New Haven	Conn
Georgetown University Hospital	Washington	D C
University of Florida Teaching Hospital and Clinics	Gainesville	Fla
Jackson Memorial Hospital	Miami	Fla
Emory University Hospital	Atlanta	Ga
Grady Memorial Hospital	Atlanta	Ga
Eugene Talmadge Memorial Hospital	Augusta	Ga
Michael Reese Hospital	Chicago	
Indiana University Medical Center	Indianapolis	
University of Kansas Medical Center	Kansas City	Kan
Louisville General Hospital	Louisville	Ky
Ochsner Foundation Hospital	New Orleans	
Baltimore City Hospitals	Baltimore	
Church Home and Hospital	Baltimore	
Johns Hopkins Hospital	Baltimore	
Sinai Hospital	Baltimore	
University Hospital	Baltimore	
Beth Israel Hospital	Boston	
Boston City Hospital	Boston	
Massachusetts General Hospital	Boston	
Massachusetts Memorial Hospitals	Boston	
New England Center Hospital	Boston	
Peter Bent Brigham Hospital	Boston	
Northwestern Hospital	Minneapolis	
University of Minnesota Hospitals	Minneapolis	
Barnes Hospital	St Louis	Mo
St Louis City Hospital	St Louis	Mo
St Mary s Group of Hospitals of St Louis University	St Louis	Mo
Jersey City Hospital	Jersey City	
Albany Hospital	Albany	N Y
Buffalo General Hospital	Buffalo	
Mary Imogene Bassett Hospital	Cooperstown	N Y
Bellevue Hospital Center Division II—Medical—Cornell University	New York City	
Bellevue Hospital Center Division III IV—Medical—New York University College of Medicine	New York City	
Bronx Municipal Hospital Center	New York City	
Jewish Hospital Brooklyn	New York City	
Kings County Hospital Center Brooklyn	New York City	
Knickerbocker Hospital	New York City	
Long Island College Hospital Brooklyn	New York City	
Maimonides Hospital Brooklyn	New York City	
Methodist Hospital Brooklyn	New York City	
New York Hospital	New York City	
Presbyterian Hospital	New York City	
St Clare s Hospital	New York City	
St Vincent s Hospital	New York City	
Genesee Hospital	Rochester	N Y
Highland Hospital	Rochester	N Y

INTERNAL MEDICINE—Continued

Rochester General Hospital	Rochester, N Y
Strong Memorial—Rochester Municipal Hospitals	Rochester, N Y
State University of New York Upstate Medical Center Hospitals	Syracuse N Y
North Carolina Memorial Hospital	Chapel Hill N C
Duke Hospital	Durham N C
Watts Hospital	Durham, N C
North Carolina Baptist Hospital	Winston Salem N C
Cleveland Metropolitan General Hospital	Cleveland Ohio
University Hospitals	Cleveland Ohio
University Hospitals	Columbus Ohio
Vanderbilt University Hospital	Nashville Tenn
Baylor University Medical Center	Dallas
Parkland Memorial Hospital	Dallas
University of Texas Medical Branch Hospitals	Galveston
Jefferson Davis Hospital	Houston
Methodist Hospital	Houston
Salt Lake County General Hospital	Salt Lake City
University of Virginia Hospital	Charlottesville Va
Medical College of Virginia Hospital Division	Richmond Va

PATHOLOGY

Number of Approved Programs 35

University Hospital and Hillman Clinic	Birmingham Ala
University Hospital	Little Rock Ark
University of California Hospital	Los Angeles
University of California Hospitals	San Francisco
Grace-New Haven Community Hospital	New Haven Conn
University of Florida Teaching Hospital and Clinics	Gainesville Fla
Emory University Hospital	Atlanta Ga
University of Kansas Medical Center	Kansas City, Kan
Louisville General Hospital	Louisville Ky
Johns Hopkins Hospital	Baltimore
Boston City Hospital	Boston
Childrens Hospital Medical Center	Boston
Massachusetts General Hospital	Boston
Massachusetts Memorial Hospitals	Boston
University of Missouri Medical Center	Columbia Mo
Barnes Hospital	St Louis Mo
Jersey City Hospital	Jersey City
Bellevue Hospital Center, Division III—Pathology—New York University College of Medicine	New York City
Kings County Hospital Center, Brooklyn	New York City
New York Hospital	New York City
Presbyterian Hospital	New York City
Genesee Hospital	Rochester N Y
Strong Memorial-Rochester Municipal Hospitals	Rochester N Y
State University of New York Upstate Medical Center Hospitals	Rochester N Y
North Carolina Memorial Hospital	Chapel Hill N C
Duke Hospital	Durham N C
North Carolina Baptist Hospital	Winston-Salem N C
University Hospitals	Cleveland
University Hospitals	Oklahoma City
Good Samaritan Hospital	Portland Ore
Vanderbilt University Hospital	Nashville, Tenn
Parkland Memorial Hospital	Dallas
University of Texas Medical Branch Hospitals	Galveston
Texas Children's Hospital	Houston
Medical College of Virginia—Hospital Division	Richmond Va

PEDIATRICS

Number of Approved Programs 56

University Hospital and Hillman Clinic	Birmingham Ala
University Hospital	Little Rock Ark
Childrens Hospital	Los Angeles
University of California Hospital	Los Angeles
University of California Hospitals	San Francisco
Colorado General Hospital	Denver
Grace-New Haven Community Hospital	New Haven Conn
University of Florida—Teaching Hospital and Clinics	Gainesville, Fla
Jackson Memorial Hospital	Miami Fla
Grady Memorial Hospital	Atlanta Ga
Michael Reese Hospital	Chicago
University of Chicago Clinics	Chicago
University of Kansas Medical Center	Kansas City Kan
Louisville General Hospital	Louisville Ky
Baltimore City Hospitals	Baltimore
Johns Hopkins Hospital	Baltimore
Sinai Hospital	Baltimore
University Hospital	Baltimore
Boston City Hospital	Boston
Boston Floating Hospital	Boston
Children's Hospital Medical Center	Boston
Massachusetts General Hospital	Boston
Northwestern Hospital	Minneapolis
University of Minnesota Hospitals	Minneapolis
University of Missouri Medical Center	Columbia Mo
Children's Mercy Hospital	Kansas City Mo
St Louis Children's Hospital	St Louis Mo
St Louis City Hospital	St Louis Mo
St Mary's Group of Hospitals of St Louis University	St Louis Mo
Children's Memorial Hospital	Omaha Neb
Jersey City Hospital	Jersey City
Children's Hospital	Buffalo
Bellevue Hospital Center—Division III—Pediatrics—New York University College of Medicine	New York City
Bronx Municipal Hospital Center	New York City
Cumberland Hospital, Brooklyn	New York City
Jewish Hospital, Brooklyn	New York City
Kings County Hospital Center, Brooklyn	New York City
Long Island College Hospital Brooklyn	New York City
Methodist Hospital	New York City
New York Hospital	New York City
St Luke's Hospital	Rochester, N Y
Strong Memorial-Rochester Municipal Hospitals	
State University of New York Upstate Medical Center Hospital	Syracuse N Y
North Carolina Memorial Hospital	Chapel Hill N C
Duke Hospital	Durham N C

PEDIATRICS—Continued

Watts Hospital	Durham, N C
North Carolina Baptist Hospital	Winston Salem, N C
Cleveland Metropolitan General Hospital	Cleveland
University Hospitals	Cleveland
Vanderbilt University Hospital	Nashville, Tenn
Children's Medical Center	Dallas
Jefferson Davis Hospital	Houston
Salt Lake County General Hospital	Salt Lake City
Children's Orthopedic Hospital	Seattle Wash
University Hospitals	Madison Wis
Milwaukee Children's Hospital	Milwaukee

OBSTETRICS AND GYNECOLOGY

Number of Approved Programs 6

University Hospital	Little Rock Ark
Johns Hopkins Hospital	Baltimore
Barnes Hospital	St Louis Mo
Strong Memorial —Rochester Municipal Hospitals	Rochester N Y
Duke Hospital	Durham N C
Watts Hospital	Durham N C

SURGERY

Number of Approved Programs 72

Veterans Admin Hospital	Salt Lake City
University Hospital	Little Rock Ark
University of California Hospital	Los Angeles
Palo Alto Stanford Hospital Center	Palo Alto Calif
University of California Hospitals	San Francisco
Colorado General Hospital	Denver
Grace New Haven Community Hospital	New Haven Conn
Providence Hospital	Washington D C
Washington Hospital Center	Washington D C
University of Florida Teaching Hospital and Clinics	Gainesville Fla
Jackson Memorial Hospital	Miami Fla
Emory University Hospital	Atlanta Ga
Grady Memorial Hospital	Atlanta Ga
Michael Reese Hospital	Chicago
Provident Hospital	Chicago
Indiana University Medical Center Hospitals	Indianapolis
University of Kansas Medical Center	Kansas City Kan
Louisville General Hospital	Louisville Ky
Ochsner Foundation Hospital	New Orleans
Baltimore City Hospitals	Baltimore
Johns Hopkins Hospital	Baltimore
Sinai Hospital	Baltimore
Union Memorial Hospital	Baltimore
University Hospital	Baltimore
Beth Israel Hospital	Boston
Boston City Hospital	Boston
Massachusetts General Hospital	Boston
Massachusetts Memorial Hospitals	Boston
New England Center Hospital	Boston
Peter Bent Brigham Hospital	Boston
Northwestern Hospital	Minneapolis
University of Minnesota Hospitals	Minneapolis
Barnes Hospital	St Louis Mo
St Louis City Hospital	St Louis Mo
St Mary's Group of Hospitals of St Louis University	St Louis Mo
Jersey City Hospital	Jersey City
Albany Hospital	Albany N Y
Bellevue Hospital Center	New York City
Division I—Surgery—Columbia University	
Bellevue Hospital Center	New York City
Division II—Surgery—Cornell University	
Bellevue Hospital Center	New York City
Division III—Surgery—New York University College of Medicine	
Bellevue Hospital Center	New York City
Division IV—Surgery—New York Univ Post Graduate Medical School	
Bronx Municipal Hospital Center	New York City
City Hospital at Elmhurst	New York City
Cumberland Hospital Brooklyn	New York City
Kings County Hospital Center Brooklyn	New York City
Knickerbocker Hospital	New York City
Lebanon Hospital	New York City
Long Island College Hospital Brooklyn	New York City
Methodist Hospital Brooklyn	New York City
New York Hospital	New York City
Presbyterian Hospital	New York City
St Clare's Hospital	New York City
St Vincent's Hospital	Rochester N Y
Genesee Hospital	Rochester N Y
Highland Hospital	Rochester N Y
Rochester General Hospital	Rochester N Y
Strong Memorial—Rochester Municipal Hospitals	
State University of New York Upstate Medical Center Hospital	Syracuse N Y
North Carolina Memorial Hospital	Chapel Hill N C
Duke Hospital	Durham N C
Watts Hospital	Durham, N C
North Carolina Baptist Hospital	Winston Salem N C
Christ Hospital	Cincinnati
Good Samaritan Hospital	Cincinnati
Cleveland Clinic Hospital	Cleveland
Cleveland Metropolitan General Hospital	Cleveland
University Hospitals	Cleveland
University Hospitals	Columbus Ohio
Vanderbilt University Hospital	Nashville, Tenn
Baylor University Medical Center	Dallas
Jefferson Davis Hospital	Houston
Methodist Hospital	Houston
Salt Lake County General Hospital	Salt Lake City
University of Virginia Hospital	Charlottesville Va
Medical College of Virginia Hospital Division	Richmond Va

FAMILY PRACTICE

Number of Approved Programs 3

Indiana University Medical Center Hospitals	Indianapolis
University of Kansas Medical Center	Kansas City Kan
Baltimore City Hospitals	Baltimore

ESSENTIALS OF AN APPROVED INTERNSHIP

Preface

The internship, since the turn of the century an integral feature in the education of a physician has been the subject of much critical discussion and study, particularly in the last few years The improvement of clinical clerkships on the one hand and the marked expansion of residency training programs on the other have altered the intern's position as a member of the hospital staff

When the internship became a generally recognized part of the education of a physician some 40 years ago, it was designed to provide the graduate's initial contact with patients, including responsibility for their care It no longer constitutes such initial contact nor is it any longer the final step in the formal education of most physicians Rather it is now only one of several graded steps toward the assumption of total responsibility for patient care As such, it remains an essential part of the education of a physician but should be redesigned to fulfill its present purpose With this concept in mind, it is evident that the internship can be conducted only in those hospitals in which the educational benefits to the intern are considered of paramount importance with the service benefits to the hospital of secondary importance

One aspect of intern education which warrants consideration is the growing discrepancy between the number of internships offered in hospitals approved for intern training and the number of applicants available to fill them While this disparity, *per se*, is of no great import, its effect on the stability of internship programs throughout the country is of serious consequence It is obvious that a sound educational program cannot be maintained if the number of interns the hospital is able to appoint varies from none at all one year to a full complement the next Further, it is unlikely that a hospital can conduct a satisfactory program with substantially less than its normal complement of interns To attract a full intern staff, many hospitals have begun to offer excessive stipends, bonuses, or other rewards of a non-educational nature Such practices all too often result in an undue emphasis being placed on the interns' services to the hospital, while the educational aspects of the program are neglected

In 1951 the Council on Medical Education and Hospitals appointed an Advisory Committee on Internships to consider the internship in its broadest aspects This committee was composed of medical educators and physicians representing hospital administration and the major clinical divisions One of the functions of this committee was to review the standards required of hospitals approved for intern training The 1952 revision of the Essentials of an Approved Internship incorporated the recommendations of the Advisory Committee on Internships, based on the results of its study

In 1954, the Ad Hoc Committee on Internships was appointed to make a further study of the internship This committee, consisting of practicing physicians who were members of the House of Delegates, made an intensive study of the problems of the internship and made recommendations concerning them, which were adopted by the House of Delegates in June, 1955 Their recommendations are incorporated in this revision

The 'Essentials of an Approved Internship" is offered as a guide to the staffs of hospitals conducting intern programs and is the basis on which their training potential will be evaluated The "Essentials" may also serve as a source of information for students planning their internship education as well as to interns themselves

I Introduction

The internship is a highly important phase in the education of a physician During this period, the young graduate is given the opportunity to put into practice the principles of preventive medicine, diagnosis, therapy, and management of patients which he learned as a medical student He is able to observe, usually for the first time, patients on a round-the-clock" basis and, if his internship is properly organized, can follow his patients from admission to discharge and subsequently in the outpatient department Under the supervision of the attending staff, he is given progressively increasing responsibility to the end that he acquires confidence in his own clinical judgment

A well-organized, effective, educational program inevitably results in the improvement of the quality of patient care in a hospital In no way does it conflict with the hospital's primary function of providing adequate facilities for the scientific care of the sick and injured by a competent medical staff For such an educational program, it is fundamental that the staff recognize its obligation to permit full utilization for teaching purposes of all patients, whether private or non-private, to whom interns are assigned If this concept cannot be accepted without reservation, the hospital staff ought not to attempt to conduct an internship program

In a hospital whose staff is responsible for intern education, services must be organized in such a manner that bedside teaching, rounds, and clinical conferences can be effectively conducted In some hospitals, particularly those in which private patients predominate, it is not practicable to organize the services on an educational basis The staffs of

familiarization with methods which may lead to better understanding on the part of the intern of the emotional status of all his patients

The preventive aspects of disease, whether organic or functional in nature, should be stressed continuously in developing the intern's skill in the management of patients Where physical rehabilitation and counseling with regard to suitable future occupation for the patient are indicated, the intern should participate in these activities

Some internships are organized especially to prepare the intern for general practice Such an internship does not differ from other internships in basic principle but may differ with respect to emphasis and allocation of time in one or more medical fields This type of internship is frequently designed to provide two years of training

III Selection of Interns

The development of a satisfactory program requires, first of all, a careful selection of applicants for appointment to the intern staff The hospital administration and the medical staff, through appropriate review of credentials, should ascertain that the personal and medical qualifications of applicants selected for internship positions are satisfactory There should be confidence that the interns appointed have the high standards of integrity, motivation, industry, resourcefulness, health, and basic medical knowledge necessary to take full advantage of the further educational experience offered This should include assignment of carefully graded and progressive responsibility for patient care The qualifications of the intern staff should leave no doubt as to their competence to accept this assignment, since the primary obligation to the hospital must be for the patients' welfare Personality characteristics can usually be evaluated through personal interview or letters of recommendation, or both For graduates of schools in the United States and Canada, the medical school accreditation program of the Council on Medical Education and Hospitals of the American Medical Association and the Association of American Medical Colleges renders reasonable assurance with regard to medical qualifications Such candidates for appointment should be graduates of approved medical schools Further individual knowledge can be obtained through direct communication with the dean's office of the school concerned

Since similar sources and kinds of information have not been readily available for graduates of foreign medical schools, the Educational Council for Foreign Medical Graduates, 1710 Orrington Ave, Evanston, Ill, has been established to provide as comparable knowledge of qualifications as possible The Council recommends that hospitals considering foreign medical school graduates for internship positions acquire reasonable assurance with regard to their medical qualifications through utilization of the program of the Educational Council

[Beyond July 1, 1960, no hospital should expect to maintain an approved internship or residency program unless its appointees who are graduates of foreign medical schools either

(1) have a full and unrestricted state license to practice,
(2) are in their final six months of training
(3) have secured a standard or temporary certificate from ECFMG

or

(4) *have been given a contingent appointment for not more than six months based on their having been accepted for the September 1960 American Medical Qualification Examination of the ECFMG* Extension of the appointment beyond December 31 1960 will be dependent upon the appointee receiving temporary or standard certification from ECFMG as a result of this examination

After July 1 1960, the Council will recommend to the Internship and Residency Review Committees the disapproval of those training programs whose rosters contain graduates of foreign medical schools who do not satisfy requirement 1 2, 3 or 4 above]

IV Hospitals Eligible for Approval

In order to provide the intern with a well-rounded experience during the course of his internship, an adequate number of patients in each of the several major clinical divisions is a primary requisite The experience of the Council indicates that an acceptable rotating internship can be offered only in general hospitals having a capacity of at least 150 beds, exclusive of bassinets, and having a minimum of 5,000 annual admissions, excluding the newborn Further, three of the four major clinical divisions must be represented in such a hospital Modern trends in practice emphasize the importance of experience in an active outpatient department Hospitals which do not have a well-organized outpatient department should provide this type of training through affiliation

The number of patients for which the individual intern is responsible is of primary importance in determining the value of the internship as an educational experience If an insufficient number of patients are available for teaching purposes, the intern's experience becomes limited in scope On the other hand, the assignment of an excessive number of patients prevents him from studying them thoroughly and from giving proper attention to all patients for whom he is responsible In general, a service to which a single intern is assigned should not consist of more than 15 to 25 beds In determining the number of patients for whom the intern is responsible, consideration must be given to work required of him in the outpatient department, the emergency room, the laboratory, and similar assignments In determining the proper number of internship positions in an approved hospital, private cases, for which the intern is allowed to assume no responsibility beyond the completion of a history and physical examination, cannot be considered as available for teaching In the event that the physician in charge does not wish to have his private patients used for teaching on the same basis as non private cases, he should not expect the intern to assume responsibility for the history and physical examination or for any other routine procedure

The number of patients for whom the intern should be responsible may vary considerably, depending upon the service and the type of patients on it Thus, one intern may well be able to assume responsibility for more than 25 chronically ill patients on a medical ward and on the other hand may

not be able to give adequate attention to 15 patients on an acute surgical service It is the responsibility of the chief of each service to which interns are assigned to evaluate at frequent intervals the amount of work being required of the interns to assure that they are not overburdened with routine responsibilities detrimental to their training and, conversely, that they have an opportunity to observe cases of sufficient variety to assure a broad and comprehensive experience

In applying a ratio of 15 to 25 beds per intern, it is evident that, in order to carry out a successful training program, a hospital of 150 beds requires an intern staff of from 6 to 10 interns It is difficult if not impossible to conduct a satisfactory intern program with less than this minimum number, while an appreciably greater number of interns assigned in a hospital of this size will often result in a work load insufficient to stimulate and hold the intern's interest

Hospitals which can otherwise qualify for approval but lack adequate clinical material of certain types may augment the education afforded their interns by establishing affiliations with other hospitals able to provide suitable experience in these areas Such affiliating hospitals need not themselves be approved Their contribution to the training program is taken into consideration in evaluation of the internship sponsored by the parent institution Except in unusual circumstances, periods of training on an affiliating basis should not exceed 3 months in a 12-month program or 6 months in a 24-month internship

Large hospitals affiliated with medical schools might well rotate their interns to smaller hospitals on an affiliating basis in order to provide experience in the practice of medicine in such hospitals

These relatively short affiliating programs may be advantageously utilized to provide training in contagious diseases, psychiatric disorders, or other special areas They should not be confused with the type of training plan in which two or more hospitals collaborate in sponsoring a joint program In such instances, usually involving a university-connected hospital and others associated with it, the participating hospitals are ordinarily all independently approved and contribute more or less equally to the training program The advantages to the intern of this type of program result from a broader experience with different types of diseases and different groups of patients and from the association of the intern with members of the teaching staffs of the several hospitals involved

In the opinion of the Council, a fixed formula for determining the number of interns for each hospital is unrealistic and impractical Any arbitrary scheme designed to allocate interns to hospitals violates the right of each intern to indicate his own choice The Council will approve the quota of interns requested by a hospital when such a request is based upon the considered ability of the staff to train adequately the number requested

Hospitals conducting or applying for approved intern or resident training programs should be accredited by the Joint Commission on Accreditation of Hospitals

V The Hospital Staff

The staff, both visiting and intern, should be composed of physicians who are graduates of medical schools acceptable to the Council Physicians appointed to the visiting staff must have proper qualifications as to medical education and licensure The staff must be limited to physicians whose professional and moral integrity are unquestioned, who are proficient in the fields of practice to which they devote themselves, who give personal attention to the patients under their charge, and who are willing to assume responsibility individually and as a group for providing ample instruction to the interns and to assist them in their work

Depending on the size of the hospital and its staff there should be a part-time or full-time instructor, teacher, or coordinator, with a suitable title, such as Director of Intern Education, whose duty it is to organize, coordinate, and supervise the educational program of the hospital in cooperation with and assisted by the intern committee and the hospital staff

Since instruction of the interns by members of the courtesy staff is usually minimal, this group should be responsible for the medical history, the physical examination, and all other routine procedures connected with the management of their private patients Adherence to this principle is particularly important when a full complement of interns is not available

VI Clinical Records

1 *Adequate Records Must Be Maintained*—(See Section XI, Nature of Intern's Duties) The attending physician or surgeon is directly responsible for the accuracy and completeness of clinical records concerning all patients under his care, including the record of the work done by the intern

2 *Endorsement of Records*—All case records must show by signature the names of the persons who have written them in whole or part Orders for treatment and for most diagnostic studies and all progress notes must indicate the identity of the person responsible for them The intern's record of his physical examination and diagnostic procedures should be verified by a competent supervising physician, with attention called to errors in observation and supplementary notes added, containing any relevant data which the intern may have omitted If the intern's record is acceptable, the supervising physician should countersign and thus approve it A summary, including the diagnosis, should be written by the intern and should be verified by the attending physician when the patient is discharged from the hospital

3 *Standard Nomenclature of Diseases and Operations*—To avoid ambiguity and lack of definiteness, it is recommended that the Standard Nomen-

clature of Diseases and Operations be used by the medical staff to record the clinical diagnosis on patients

4 *Filing and Indexing Records*—A competent medical record librarian should be in charge of the filing and indexing of records All case records should be readily available for study or for reference When a patients is admitted to the hospital, all previous records, including outpatient records and, if possible, the attending physician's office record, should be available without loss of time In addition to the usual index of patients by name and number, there should be cross-indexing according to diagnosis and operation (surgical cases)

5 *Annual Report*—Statistics concerning the professional work of the hospital should be compiled monthly and should be available to the medical staff at all times An annual report should be prepared to include analysis of statistics for all departments For each clinical department, at least the following data concerning private and ward services should be included in the report (*a*) number of patients admitted or discharged, (*b*) number of hospital days of care or average daily census, (*c*) deaths and autopsies, (*d*) surgical procedures, and (*e*) number of cases admitted or discharged A breakdown of discharges by diagnoses should be obtainable

6 *Medical Audits*—A medical audit is a periodic review of the medical records of selected cases by an impartial and competent committee composed of members of the professional staff of the hospital Such a review considers the adequacy and completeness of the diagnostic examination, the quality of judgment used in the number and nature of tests employed, the correctness of the diagnosis, as recorded by the study of the patient and subsequent development and findings, the suitability of the treatment used, and the competence exhibited Medical audits are helpful in determining the quality of medical practice in a hospital and thus in evaluating the hospital's teaching potential

VII PATHOLOGY

1 *The Pathologist*—The pathologist should hold the degree of doctor of medicine from an acceptable medical school and have qualifications which are acceptable to the Council The pathologist must devote sufficient time to the hospital to assure adequate supervision of the work done in the pathology laboratories, to examine or supervise the examination of all tissues removed in surgical operations and to furnish reports of the gross and microscopic findings, to perform or supervise the performance of all autopsies and render a full report of the findings, to assist in the teaching of interns, to supervise or arrange for supervision of the interns' work in the laboratory or on the hospital floors, to be available for consultation with the attending and intern staffs, to attend staff meetings, and to conduct or participate in clinical-pathologic and departmental conferences

The pathologist should attend ward rounds frequently so that he may participate in the clinical evaluation of patients and confer with the intern and attending staffs regarding the selection and interpretation of clinical laboratory procedures, as well as gain an opportunity to detect any inadequacies in the performance of laboratory work in the hospital

2 *Personnel*—There should be adequate laboratories in the hospital for clinical and tissue pathology These laboratories should be staffed and equipped to perform all procedures commonly used for diagnosis, management, and therapy

3 *Autopsies*—The hospital must provide proper facilities for postmortem examinations The autopsy rate has come to be recognized as an index of the scientific interest of the medical staff Well-performed postmortem examinations and a study of their findings enable physicians to improve their clinical ability A hospital which does not maintain an autopsy rate of at least 25% of its deaths, exclusive of stillbirths and cases released to legal authorities, may not be approved

4 *Records*—The result of each examination performed in the laboratory should be recorded in the departmental file and on the patient's clinical record Complete reports on surgical specimens and all autopsy protocols must be attached to the patient's charts, with identical reports retained in the files of the department where they should be indexed by name, number, and diagnosis The original and all copies of such reports must be signed and legible Microscopic sections of specimens removed at operation or by autopsy should be filed in the hospital laboratory The laboratory copy of certain types of routine reports need be retained for a limited period only

VIII RADIOLOGY

1 *The Radiologist*—The radiologist should hold the degree of doctor of medicine from an acceptable medical school and have qualifications in radiology satisfactory to the Council He shall devote sufficient time to the hospital to supervise adequately the technical work of the department, to perform or supervise fluoroscopic examinations, to interpret films, to consult with staff physicians, and to instruct the interns He should attend staff meetings and the meetings of his department as well as those clinical conferences in which his participation may be of value to the attending and intern staff

2 *Equipment*—The department should be equipped with suitable, safe apparatus The rooms provided for fluoroscopy and for viewing roentgenograms should be large enough to accommodate both interns and attending physicians during the examination of patients or the interpretation of films

3 *Records*—A copy of each examination report should be kept in the department, in addition to the copy filed in the patient's record These reports and their original films should be filed and indexed

by name, number, and diagnosis Because of storage space problems it may be necessary to limit the time for keeping the original films to a period of 5 to 10 years, except for those films designated for the teaching file

IX Medical Library

It is essential that there be an adequate medical library readily accessible to the house staff To facilitate its use, the library should be properly supervised It should contain a useful collection of standard textbooks, monographs, and reference books In addition, the library must make readily available to the intern staff current issues of representative medical journals covering the major clinical fields The library need not necessarily contain a large number of textbooks and journals, particularly if other resources are available to it Such outside facilities, however, should be considered supplementary to, and not a substitute for, the hospital library

It is the responsibility of the attending staff to guide the intern in his reading This may be accomplished by requiring the intern to report current medical opinion concerning types of cases similar to those on his service or by assigning special topics or selected journals for review by the intern at staff conferences or journal club meetings The success of such activities will depend directly upon the stimulus and interest of the responsible staff member If the intern is to be expected to carry out his assignment successfully, he must have adequate time for study and preparation Requiring interns to report on current literature will serve no useful purpose if routine responsibilities are so heavy that reading assignments become onerous

X Organization and Conduct of the Internship Teaching Program

1 *The Staff and Its Organization*—The attitude of the staff is of paramount importance to the development of a good intern-training program Its members must fully appreciate that the internship is an educational experience and must be willing to accept their share of responsibility for its conduct No program designed primarily for service to the physician or the hospital can be considered as meeting the requirements of an approved internship

Hospitals conducting intern training should be organized into departments or sections of medicine, surgery, pediatrics, obstetrics, pathology, and radiology Hospitals lacking any of these services should afford experience in these branches through affiliation Large hospitals will undoubtedly also have separate services in general practice and in one or more of the various specialties, such as anesthesiology, contagious diseases, neurology, neurosurgery, ophthalmology, otolaryngology, orthopedics, gynecology, physical medicine, psychiatry, and urology While a highly developed organization of this sort may well be beneficial from the standpoint of patient care, it may prove detrimental to internship training Any effort to arrange a rotation through all or even a majority of the above-mentioned services during a 12-month period will inevitably result in a kaleidoscopic experience which decreases in instructional value in direct proportion to the increase in the number of services encompassed Internship-planning committees should study the situation in their hospital and, in arranging the rotation of assignments, place the interest of the intern above that of service to the hospital

In a rotating internship, the schedule should include assignments to services in medicine, surgery, pediatrics, and obstetrics, but the time spent on each service need not remain fixed for all interns Rotation through other services should be arranged with a view to the future plans of the specific intern and the needs of the hospital Under this plan the service needs of some of the more highly specialized departments would be supplied in part by rotating interns, in part by straight interns or by residents If training is needed by a given intern in some specialty to which he is not assigned, it may be provided through work with consultants on his patients, on other services, and at times by outpatient experience

It is important that the intern have an opportunity to observe and participate in the total care of the patient In order that this may be accomplished, he should follow as many patients as possible through their full hospital course, including outpatient observation Rotation which does not provide a minimum of two months of training on a given service fails to meet this objective

Each department or section should have a chairman who serves for at least one year He should be well qualified for this position by training and experience in his special field, should be responsible for the general conduct of the clinical work in his department, and should help to formulate and execute the intern training plan Frequent rotation of attending physicians in charge of the various services should be avoided Assignments should be made so that the intern has ample opportunity to meet the attending physicians frequently for the conduct of organized ward rounds or clinics and for the study and care of the patients for whom he is responsible In order to assure the proper teaching relationship between interns and attending physicians, no intern should be expected to assist an unreasonable number of attending or visiting physicians

2 *Intern Committee*—There should be a committee of the staff chosen from the chairmen of the several departments or from among able and interested departmental representatives This committee should assume responsibility for the organization, supervision, and evaluation of the plan of intern instruction

3 *Director of Intern Education*—The appointment of a director of intern education on a full-

time or part-time basis may be desirable in many hospitals The director should be a person who has had experience and training that qualify him to plan and direct a sound program of instruction with the assistance and cooperation of other members of the intern committee and the staff One of his important responsibilities should be to observe closely the operation of the program He should be vested with sufficient authority to insure that his recommendations are carried out effectively In cooperation with the chairmen of the several departments and the administration, he should be responsible for the integration of the various educational activities of the hospital

The teaching obligations of individual staff members cannot be delegated to the director of intern education, even though it is to be expected that he will take an active part in the teaching program His function is to organize and supervise a program which will increase the effectiveness of participation of individual staff members

4 *Orientation*—It is recommended that there be a period at the beginning of the internship devoted to orienting the intern to the administrative and professional organization of the hospital to the facilities available in the laboratories, and to such ancillary services as nursing, social service, dietetics, physical therapy, the record room, and the pharmacy This orientation should be given early in the course of the internship and should be followed by conferences in which personnel from these several services participate

5 *Classroom Facilities and Teaching Aids*—The availability of suitable rooms for conferences, seminars, and other educational activities of a well-conducted teaching program is highly desirable, if not essential Attempting to hold discussions of a formal or informal nature in the hospital's corridors or other areas not intended for the purpose is unsatisfactory Teaching aids such as projectors, x-ray view boxes, blackboards, and the like should be provided Teaching films may be successfully employed in presenting certain types of material not otherwise available It should be stressed, however, that none of these methods of instruction supplants the basic features of a satisfactory internship program—bedside teaching

6 *Educational Program*—(*a*) Bedside Teaching The most important phase of intern instruction consists in regularly organized daily ward rounds, with well-conducted teaching at the bedside By this is meant systematic instruction of the intern by the attending physician, with an ample discussion of the history, the physical examination, the clinical and laboratory findings, the diagnosis, and the treatment of each patient The social and psychological aspects of the case should receive proper emphasis It is the duty of the attending physician in direct charge of the patients assigned to the intern to conduct such teaching It cannot be delegated to others, though it should be supplemented by supervision of the intern's work by the director of intern education, junior staff members, and residents Intern assignments which have no educational value should be avoided

(*b*) Conferences Clinical conferences are second in importance only to bedside teaching in the formal educational program To be effective, they require planning and preparation on the part of both staff and interns and active participation by the latter group The organization and conduct of clinical conferences of good caliber is a measure of the effectiveness of the teaching program

All conferences should be scheduled at hours and places convenient to the house staff Interns should be excused from attending such conferences only for emergency calls or equally cogent reasons The number and variety of conferences will of necessity vary with the size of the hospital and other factors They should be of sufficient frequency to become an accepted feature of the intern's schedule but not so frequent that they interfere with the proper care of patients The following suggestions are offered as a guide

(1) Department Conferences In smaller hospitals each major department should conduct at least one staff conference monthly, scheduled in such a manner that a conference takes place on the same day each week In larger hospitals, departments may desire to conduct weekly conferences In such cases the requirements for the intern's attendance can be modified accordingly The more highly specialized departments should schedule conferences as often as may be considered necessary by the department staff

(2) Clinico-Pathological Conferences These important conferences should be conducted by the pathologist in cooperation with several clinical departments While the frequency of such conferences will vary with local conditions, they should be held at least once each month

(3) X-Ray Conferences These conferences may be scheduled separately or held conjointly with other departmental meetings Effective teaching can be carried out by bringing the interns, including those not familiar with the case, into the discussion of the x-ray findings In addition to formal conferences, the roentgenologist should be available to review films on the intern's patients with him

(4) Record and Fatality Conferences The treatment and management of all fatal cases should be subjected to critical analysis at departmental meetings attended by the chairman of the department, the attending physician, and other staff and house physicians, including the interns At the same or similar departmental conferences, the records of all patients whose treatment might be the subject of controversy should be carefully reviewed and discussed

These conferences may be informal but should not be perfunctory They should be held soon enough after a patient's death or discharge for the patient's history and findings to be fresh in the minds of all concerned Few phases of an intern's

training can approach these conferences in the opportunity they provide to instill in the intern an attitude of critical examination of his clinical judgment and skill

(5) Tissue Committee Under some circumstances, it may be desirable to establish a special committee (*a*) to study and to report to the staff or the Executive Committee of the staff the agreement or disagreement between preoperative diagnosis and reports given by the pathologist on tissues removed at operation and (*b*) to review the records and materials pertaining to all normal tissues removed by surgical means

The committee thus lends objective assistance to the pathologist in evaluating the clinical judgment of members of the surgical staff in those instances in which such an evaluation appears to be indicated Such a committee should comprise at least five senior members of the staff and should include specifically the chiefs of the pathology, surgical, and gynecological services

(6) Journal Club Conferences An effective method of stimulating the intern staff to read the current literature is presented through informal discussions centering around the more important articles in the various journals, especially articles immediately pertinent to the intern s clinical experience They may be conducted on a departmental basis, rotated through departments, or they may be general in nature In view of the demands on the time of the interns and attending staff, they may be conducted as luncheon conferences if facilities permit

7 *Special Features in Major Departments*—(*a*) Internal Medicine This department should afford each intern adequate instruction and experience in general medicine, including the psychological, social, and somatic aspects of disease, and in such medical procedures as are commonly employed in the practice of internal medicine Precaution should be taken on large services that medical care is not so divided among the various medical subspecialties that the intern loses sight of the patient as a whole and as a person, or that the time spent on a service is not so fragmented that the intern receives only a superficial orientation to several fields On such services, there is also particular danger that the intern may be relegated to a minor role in the care of the patient in favor of the resident or research assistant

(*b*) General Surgery Surgical training should be planned to emphasize diagnosis and preoperative and postoperative care, and not skill in operative technique Special attention should be given to problems encountered in the emergency room and to minor surgical procedures as carried out in the outpatient department In the operating room, the intern's role should be that of an assistant rather than of an operator He should not be required to spend excessive time in the operating room to the neglect of the other phases of his training in this department The dressing of surgical wounds should be regarded as an important part of his experience, giving him a particularly valuable opportunity to observe the immediate effects of surgical procedures and treatment He may obtain instruction and experience in the use of anesthetics under the supervision of a trained anesthesiologist In large hospitals where the surgical specialties are organized as separate services, the assignment of the intern should be determined by the intern committee and the surgical staff after careful consideration The precautions noted relative to assignments to the medical subspecialties are equally applicable to the surgical subspecialties

(*c*) Obstetrics The intern is expected to assist at the delivery of all patients assigned to him and to deliver a minimum of 10 patients under direct supervision Limited training in obstetric anesthesia is desirable Emphasis should be placed on teaching the intern the proper management of normal labor and delivery and on the recognition of the complications of labor which require expert consultation A most important aspect of intern education in obstetrics is the experience to be gained in the outpatient department with prenatal patients and their problems Too frequently, the intern is not given this opportunity, with the result that his concept of obstetric care is distorted and his knowledge of the patients' problems, as he will encounter them in his office, is limited If active prenatal and postnatal care is not carried out at the hospital, arrangements should be made for the intern to obtain this type of experience through affiliation

(*d*) Pediatrics Training in pediatrics, in addition to affording the intern an adequate amount of instruction and experience in the medical, surgical, and psychiatric aspects of the diseases of infancy and childhood, should include experience in the care of the newborn and should acquaint him with the normal patterns of growth and development In view of the importance of care of newborn infants in the work of the general practitioner, obstetrician, and pediatrician, it is incumbent on all hospitals to afford ample experience in this field to at least all interns contemplating the possibility of undertaking general practice

Well-child care, including immunization procedures, is assuming increasing importance in the work of general practitioner and pediatrician Wherever possible the hopital should offer training in this field through well-child conferences and well-baby clinics Straight pediatric internships should provide training in surgical as well as medical pediatrics, including their subspecialties

(*e*) Pathology The intern should receive supervised experience in the performance of all clinical laboratory procedures which are ordinarily employed in the initial study of the patient In addition, through formal and informal conferences with the pathologist, the intern should become thoroughly familiar with the availability, significance,

and limitations of those procedures which are usually performed only in the central hospital laboratory He should be required to be familiar with the pathological studies of surgical specimens and autopsy material which concern his own patients Except in emergencies no assignment should be permitted to interfere with his attendance at the postmortem examination of any case which has been under his care He should assist in the preparation and presentation of clinico-pathological conferences when cases assigned to him are being reviewed Interns assigned to the department of pathology should assist in the performance of autopsies and in the examination of surgical specimens They should also receive instruction in interpretation and techniques of clinical laboratory procedures

(*f*) Psychiatry If inpatient psychiatric services are not available in the hospital, the education of the intern in this field should be provided by psychiatrists assigned to the various major clinical services These physicians should not only assist in the management of acute psychiatric cases but should provide a continuous service relating to all types of patients' problems, thus furnishing an additional contribution to the total care of the patient Where psychiatric outpatient clinics exist, the intern should have the benefit of experience with this type of patient

(*g*) Radiology The intern should be familiar with the interpretation of x-ray films on all patients assigned to him Whether radiologic training should be offered as a separate service, in addition to its inclusion in the daily care of patients on all services, must be decided on the basis of local conditions and after consideration of factors involved by the chairman of that and other departments

(*h*) Outpatient Department The changes in medical practice resulting from new drugs and other advances in medical care require reevaluation of the importance of outpatient training during the internship Hospitals should provide to all interns carefully supervised experience in ambulant care under circumstances comparable to the office practice of medicine Outpatient assignments should be closely correlated with corresponding services in the hospital, thus affording the intern an opportunity to see serious illness in its earlier aspects and encouraging follow-up work and observation of hospitalized patients over a longer period of time A well-supervised teaching experience in the outpatient department should give the intern an understanding of the functions of community health agencies

XI Nature of the Intern's Duties

Each intern caring for and in charge of patients should obtain and write or dictate the history, perform and record the results of the physical examination, and state his diagnosis on all patients assigned to him He should perform laboratory work of such nature as will give him familiarity with and competence in the performance of those procedures which the practicing physician is ordinarily or usually called upon to perform In addition, under adequate supervision he may be given some experience in the hospital laboratories with more complicated and difficult tests He should be familiar with the proper use of such tests and the interpretation of the results He should not be burdened by an excessive amount of routine procedures of limited educational value, nor should he be assigned to tasks of a non-professional nature The non-operative and non-specialized treatment of each patient under his care is his responsibility under the critical guidance and supervision of the attending physician Such supervision should be greater during the early stages of his internship with increasing responsibility afforded the intern as his training progresses and his capabilities are demonstrated

He should make ward rounds with the attending and resident staffs at suitable intervals, preferably daily At such times, he should visit the patients under his care and others, discussing their progress He should receive instruction, information, criticisms, advice, suggestions, and assistance from his superiors, who thus contribute to his education When serving on surgical services, he should attend operations to which he may be assigned He should act in the capacity of an assistant, as directed by his superiors, thus attaining knowledge and experience with respect to operating room procedures and techniques

The intern should make frequent progress notes on the record describing the patient's clinical course and should record all treatment or special diagnostic procedures or make certain that they are promptly and correctly recorded When a patient is discharged, the intern should write a concluding note which summarizes the patient's course in the hospital, describes the patient's condition as he leaves, and states the final diagnosis

He should attend autopsies on his own and other patients, seminars, staff meetings, clinico-pathological and radiologic conferences, and meetings at which there is a discussion of patients' records subsequent to discharge In those hospitals with emergency and outpatient services, he should be given assignments in which the basic principles of his professional duties are the same as those on the inpatient service He should meet the family and friends of his patients and judiciously confer with them He should consult with social service regarding the social, emotional, and environmental aspects of the patient's disease and the community resources available

In view of the importance of every physician learning to function as a member of a team, the intern should consult freely with the nursing staff, dietitians, and physical and occupational therapists, as well as with social service workers, concerning all problems which lie within their respective fields of interest Similarly, he should not overlook the valued assistance he can frequently

obtain from his patients religious counselors He should report all notifiable diseases as required by law to the proper authority

Not infrequently the intern is given the opportunity to take a part in the instruction of medical students, nurses, social workers, and others who participate with him in teaching and service activities of the hospital Such opportunities are to be welcomed as providing a stimulus to the intern to add to his own knowledge and understanding of a subject and to organize and clarify his thinking Such opportunities also serve admirably to introduce the intern to the role of teacher, a role which in one capacity or another he will be called on to fill at many points in his later career

An intern's duties and responsibilities are not discharged on a 'nine-to five basis While an acceptable internship provides for a reasonable amount of free time, his thought for and contact with his patients should be on a 'round-the-clock basis He is thus properly subject to call at all times except when specifically off duty, and arrangement must be made to ensure his prompt availability Such close attendance on his patients is an important factor in the educational experience of the intern

Since the intern is a full-time student, he should devote his time to his educational program and may not accept outside remunerative positions Exceptions to this principle should be made only with the approval of the hospital staff and administration

VII Miscellaneous

1 *Rules for the Intern Staff*—A set of rules and regulations setting forth the intern s duties and privileges should be provided by the hospital In a well-organized, comprehensive program these may be expanded in the form of a manual to include floor procedures, general orders and the like, in addition to defining the intern's responsibilities

2 *Record of Interns Assignments and Certificate of Service*—It is advantageous both to the hospital and to the intern that an adequate record be kept of his activities on each service to which he is assigned Such information is helpful to the hospital in evaluating its intern-training program and is required by some state licensing boards and other agencies At the completion of his internship, he should be furnished with a certificate of service attesting to the satisfactory completion of his training period The hospital is justified in withholding such a certificate only if the intern fails to complete his internship or if his performance has been such as to indicate that he is unfit for the practice of medicine Under no circumstances should the hospital arbitrarily refuse to issue such a certificate for relatively minor reasons In the event of illness necessitating the intern's withdrawal from training, the hospital may properly issue a certificate to include the period of training completed

3 *Interns' Stipends*—Traditionally, the internship has been considered an extension of the physician's education during which he provides the hospital with certain services in return for his experience The increased costs of a medical education and the additional financial obligations with which many graduates are burdened have made the payment of a reasonable stipend to interns, which may be considered as a scholarship for graduate study, a widely accepted practice However, when a hospital resorts to the payment of excessive salaries, bonuses, or other forms of remuneration to attract an intern staff, there is reason to question the adequacy of its educational program

4 *Interns' Living Quarters*—It is expected that the hospital will provide its intern staff with healthful food as well as adequate living quarters and recreational facilities The hospital may also provide suitable living accommodations for married interns, preferably within or adjacent to the hospital

5 *Interns Health*—The hospital should be concerned with the intern s health during his period of service Each intern should be given a thorough physical examination, including a roentgenogram of the chest and routine laboratory studies, at the beginning of and periodically as might be indicated during his internship A member of the attending staff should be assigned the responsibility of acting as personal physician to the interns, with a readily available consultation service provided by other members of the attending staff The hospital should be willing to accept a reasonable share of the responsibility for continuing care of long-term illness contracted by the intern directly in the discharge of his duties

6 *Intern-Resident Relationship*—In a hospital conducting both intern and residency training, care must be exercised to assure that neither group is neglected in the training program The duties and responsibilities of both intern and resident should be clearly defined to preclude this possibility It is obvious that the intern cannot be given the same degree of responsibility as that assumed by the resident However, the intern should not be relegated to a position of an assistant to the resident performing routine duties of little or no educational value A well-integrated intern-resident program can enhance the value of the training received by each member of the house staff Conversely, a program in which either the intern's or the resident's training is stressed to the neglect of the other will result in a lowering of morale and consequent dissatisfaction It is the responsibility of the chief of each service to assure that every member of the house staff is receiving the attention he requires and is given responsibility commensurate with his ability and stage of training

7 *Hospital-Intern Agreement*—A formal agreement in which mutual obligations are defined should be entered into between the hospital and the applicant at the time of his appointment This agreement must be honorably fulfilled by both parties and should be terminated only by mutual consent A breach of the agreement by either a

hospital or an intern is not condoned by the Council Whenever complaint of such a breach is made, it is the policy of the Council to ask each of the parties involved to submit an explanatory statement Such statements become a part of the physicians and the hospital's record and are made available on request to authorized agencies

VIII Admission to the Approved List

Application for Approval—Hospitals that desire to qualify for approval for intern training should apply to the Council on Medical Education and Hospitals of the American Medical Association, 535 N Dearborn St, Chicago 10 Appropriate forms for this purpose will be furnished on request They should be completed with care by the hospital administrator or a member of the staff who is acquainted with the hospital's proposed program with one copy to be returned to the Council's office On receipt of the application, arrangements will be made for a member of the Council's staff to visit the hospital for the purpose of reviewing the training program and inspecting facilities

Evaluation of intern-training programs in hospitals will be made on an individual basis, with all available pertinent data taken into consideration and reasonable flexibility used in the application of requirements

Approval for intern training, including the number and type of internships, is granted on an annual basis, through publication of the name of the hospital in the list of approved programs in the Internship and Residency Number of The Journal This special issue of The Journal will appear each fall Recognition of a hospital for intern training may be withdrawn at any time it is adjudged by the Council that the hospital fails to comply with one or more of the requirements set forth in these "Essentials of an Approved Internship"

If a hospital does not maintain a 25% autopsy rate on hospital deaths for two consecutive years, approval may be removed

A hospital which for two successive years does not obtain one-fourth of its stated complement of interns may be disapproved for intern training Under such circumstances it is improbable that a balanced training program can be maintained Further, those interns who are appointed must assume a greatly increased work load, with a resultant deterioration in the educational experience This policy is necessary to insure that an applicant will receive a sound educational experience when he accepts an appointment to a hospital approved by the Council Hospitals whose approval is withdrawn on this basis may apply for reinstatement to the approved list on presentation of evidence that would lead to a reasonable conclusion that they will be successful in appointing interns in sufficient numbers to maintain a satisfactory training program

Appendix Suggestions to Hospitals Not Eligible for Internship Approval

Hospitals which are unable to qualify for internship approval should give consideration to other means of providing adequate medical service It should be noted that less than 15% of the hospitals in this country are approved for intern education Although the immediate availability of physicians on a 24-hour basis and the maintenance of adequate clinical records is a major problem facing many hospitals lacking intern staffs, unquestionably a large proportion of them provide a high level of patient care despite this lack

The following suggestions for providing adequate medical service on a 24-hour basis are offered to the staffs of hospitals unable to qualify for internship approval

1 Depending on the size of the hospital, one or more younger physicians who have completed their formal hospital training may be employed to assist the attending staff in the care of their patients by performing certain of the functions ordinarily carried out by the house staff An adequate salary and living quarters within the hospital or on the hospital property should be provided These physicians should be employed under terms which conform to accepted ethical practices

2 If the size of the hospital staff makes it practicable, responsibility for night duty, or 24-hour duty, may be arranged for through rotation of this assignment among the members of the junior attending staff

3 If the junior staff is too limited in number, these duties may be rotated through the entire attending staff

4 A junior attending or courtesy staff physician who is just starting the practice of medicine in the community may be employed on a part-time basis to care for emergencies and perform house-staff duties during the night

5 Nurses, qualified technicians, and other ancillary personnel may be trained to perform many procedures ordinarily assigned to the intern staff

With respect to the maintenance of adequate records, hospitals not conducting educational programs may give consideration to developing a type of clinical record that will be more economical of time and effort than the type required of hospitals conducting educational programs and still include all essential data A concise, inclusive clinical summary, along with a brief history and report of physical examination, perhaps of a check-list type, may frequently suffice for this purpose, particularly if supplemented by copies of records from the physician's office Except for emergency admissions, the hospital could require that each referring physician supply a copy or summary of the patient's office examination and diagnosis to serve as an admission note

Directory of Approved Residencies

Council on Medical Education and Hospitals of the American Medical Association

535 North Dearborn Street, Chicago 10

Revised to September 1, 1960

Hospitals, 1 307 Residencies, 31,733

Residency training programs in the following specialties or subspecialties have been approved by the Council on Medical Education and Hospitals as meeting the requirements of the Essentials of Approved Residencies, which are published separately by the Council For the majority of specialties special Review Committees exist composed of representatives of the Council, representatives from the specialty boards concerned, and in some cases representatives from a national professional organization in that special field The sponsoring parent organizations for the Review Committees approve changes in policy but in general have delegated final authority to the Review Committees for approval or disapproval of training programs and their listing in this Directory

In this issue, the format for listing residencies has been changed so that special features have been added for the first time General features relating to the hospitals will be found in the consolidated list page 585

The average daily census for each specialty service usually reflects a 12-month period ending Sept 30, 1959

The total admissions to each service include transfers to that service from other services in the hospital See introductory paragraph of Directory of Approved Internships for relation of these figures to average length of stay

The total number of deaths and the autopsy percentage is shown for each specialty so that one can calculate the actual number of autopsies performed for the particular service, and can further calculate mortality rates as an index of the severity of illnesses admitted to the particular service

Outpatients visits may include emergency room visits as well

The tabulation of residencies offered in successive years includes all positions available for each of four years The pyramidal or vertical nature of each program is thus suggested In some instances the total of residencies offered might be greater than the sum of those shown for each of the four years thus indicating that appointments might be made for periods longer than four years In some instances the caption heading a specialty list will describe special identification of those hospitals offering training beyond the period for which approved

The stipend range lists the beginning minimum stipend for a single resident and the maximum stipend in the final year of the approved program As for the list of approved internships FM means full maintenance and PM means partial maintenance If full maintenance is provided for single residents, and additional benefits (including additional stipend) are paid to married residents, then both FM and PM will be indicated by the initials FP PM alone means partial maintenance for both single and married residents but might include additional stipend for the married residents FM alone means full maintenance for both single and married No maintenance symbols means the hospital pays a stipend only

INDEX TO LIST

1	Allergy	675	16	Otolaryngology	734
2	Anesthesiology	676	17	Pathology	737
3	Aviation Medicine	681	18	Pediatric Allergy	749
4	Cardiovascular Diseases	682	19	Pediatrics	749
5	Child Psychiatry	684	20	Physical Medicine and Rehabilitation	757
6	Dermatology	684	21	Plastic Surgery	760
7	Gastroenterology	686	22	Preventive Medicine	762
8	General Practice	688	23	Proctology	764
9	Internal Medicine	693	24	Psychiatry	764
10	Neurological Surgery	704	25	Public Health	776
11	Neurology	707	26	Pulmonary Diseases	776
12	Obstetric and Gynecology	710	27	Radiology	779
13	Occupational Medicine	720	28	Surgery	787
14	Ophthalmology	720	29	Thoracic Surgery	803
15	Orthopedic Surgery	725	30	Urology	806

1 ALLERGY

Residency programs in the following hospitals have been approved up to June 30, 1961, for ONE to TWO years of training by the Council and the Subspecialty Board for Allergy of the American Board of Internal Medicine
See special announcement Page

(For programs in Pediatrics Allergy see Page 756)

Hospitals 23 Residencies 30

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min	Stipend Per Month: Max	Main tenance FM PM O
UNITED STATES ARMY														
DISTRICT OF COLUMBIA														
Walter Reed General Washington	H E Ratcliffe	4	49			22 406	1	0	0	0	= 1			

Numerical and other references are listed on pages 811 through 814

1 ALLERGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Maintenance FM PM O
NONFEDERAL AND VETERANS ADMINISTRATION													
CALIFORNIA													
La Jolla													
Scripps Clinic and Research Foundation	I L Keeney	2	70	1	100	6 960	1	0	0	0	= 1	415-415	PM
Long Beach													
Veterans Administration	K H Thaver	37	367	40	88	7 999	0	0	2	0	= 2	347 462	O
San Francisco													
Kaiser Foundation	B F Feingold						0	0	0	1	= 1	520 570	FP
ILLINOIS													
Chicago													
Michael Reese	M M Mosko	3	100			3 941	1	0	0	0	= 1	125 125	
Northwestern Univ Med Center	S Feinberg					1,090	1	0	0	0	= 1	250-300	O
Univ of Illinois Research and Educational Hosps	M Samter	1	11			6,660	1	0	0	0	= 1	300 300	O
MASSACHUSETTS													
Boston													
Massachusetts General	F C Lowell												
MICHIGAN													
Ann Arbor													
University	I M Sheldon					12 345	0	0	0	3	= 3	275-275	O
MINNESOTA													
Rochester													
Mayo Foundation—222		Inc in Int Med										200 200	
MISSOURI													
St Louis													
Barnes	I Noah					2 109							
NEW YORK													
Buffalo													
Buffalo General	C E Arbesman					1,866	1	1	0	0	= 2	300-400	O
New York City													
Jewish	M Grolnick		41			8 508	0	0	1	0	= 1	125-125	FM
Roosevelt	R A Cooke	10	177	2	50	21 227	3	0	0	0	= 3	233 275	PM
NORTH CAROLINA													
Durham													
Duke	H O Sieker	4	205			590	0	1	0	0	= 1	200-300	O
OHIO													
Columbus													
Ohio State Univ Hosps University	W F Mitchell					2,459	0	0	1	0	= 1	252 252	PM
PENNSYLVANIA													
Philadelphia													
Hosp of Univ of Pennsylvania	F Hildreth					1 407	2	2	1	0	= 5	167 400	
Temple University	I Tuft					3 925	1	0	0	0	= 1	175 175	PM
Pittsburgh													
Montefiore	L H Criep	1	36			3 440	1	0	0	0	= 1	225 225	FM
Veterans Administration	L H Criep	15	360	3	66	315	2	0	0	0	= 2	270-270	O
VIRGINIA													
Charlottesville													
Univ of Virginia	O Swineford Jr	7	248	1	100	1 065							
Richmond													
Med College of Virginia Hosp Div	M E B Owens, Jr					5 001	1	0	0	0	= 1	150-150	FM
WISCONSIN													
Madison													
University Hosps	S B Crepea	3	151			5 529	1	0	0	0	= 1	200 200	FM

2 ANESTHESIOLOGY

Residency programs in the following hospitals have been approved for TWO years of training by the Council and the American Board of Anesthesiology, through the Residency Review Committee for Anesthesiology

Hospitals 238 Residencies 1,495

	Chief of Service or Program Director	Total Anesthetics	Consultation on Non surgical Patients	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Maintenance FM PM O
UNITED STATES AIR FORCE										
TEXAS										
U S Air Force San Antonio [illegible]	R F Tau	5 595		3	3	0	0	= 6		
UNITED STATES ARMY										
U S Army Coordinated Program [illegible]	H C Slocum	5,210	2 673	5	8	8	0	= 24		
Letterman General, San Francisco	C H Mitchell	5 520	2 666							
Fitzsimons General Denver	I G Inman	10 589	4 067							
Army Medical Center Washington D C [illegible]	H C Slocum	6 745	3 014							
Brooke General San Antonio Texas	I A Jenicek									
UNITED STATES NAVY										
CALIFORNIA										
U S Naval, Oakland	F E Parker	9 817	112	2	2	0	0	= 4		
U S Naval San Diego	B M Shephard	17,719	80	2	2	0	0	= 4		
MARYLAND										
U S Naval Bethesda	J G Kurfees	10 121	89	2	2	0	0	= 4		

Numerical and other references are listed on pages 811 through 814

2 ANESTHESIOLOGY—Continued

	Chief of Service or Program Director	Total Anesthetics	Consultations on Nonsurgical Patients	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	FM Main Maintenance PM O
MASSACHUSETTS										
U S Naval Chelsea	D Buechel	7 548	23	2	1	0	0	= 3		
NEW YORK										
U S Naval [5] New York City (St Albans)	D N Pino	5 563	176	2	1	0	0	= 3		
PENNSYLVANIA										
U S Naval [55] Philadelphia	T C Deas	6 814	200	2	2	1	0	= 5		
UNITED STATES PUBLIC HEALTH SERVICE										
NEW YORK										
U S Public Health Service New York City (Staten Island)	K F Urbach	3 419	84	2	2	0	0	= 4		
NONFEDERAL AND VETERANS ADMINISTRATION										
ALABAMA										
Birmingham [3]										
University of Alabama Medical Center [55]										
University Hosp and Hillman Clinic	A Mc Neal	8 475		3	3	0	0	= 6	108-115	
Fairfield										
Lloyd Noland [5]	R W Grady	4 070	450	2	1	0	0	= 3	250-300	FM
ARKANSAS										
Little Rock										
St Vincent Infirmary	J P Hickey	6 880	75	4	4	0	0	= 8	300-500	O
University	C W Shafer	4 360	75	3	3	0	0	= 6	180 195	O
CALIFORNIA										
Loma Linda										
Loma Linda Sanitarium and Hosp [5]	B D Briggs	2 787		3	2	0	0	= 5	315-325	O
Los Angeles										
Los Angeles County [55]	J Denton	15,534		14	13	0	0	= 27	273-288	PM
University of California [55]	J B Dillon	4 607	85	4	4	0	0	= 8	240-314	FPO
Veterans Admin [55]	P F Shroff	5 096	25	6	5	0	0	= 11	271 348	PM
White Memorial [5 55]	E F Leffingwell	6 182	45	7	5	0	0	= 12	215-225	PM
Oakland										
Highland Alameda County [55]	C H Callup	5 447	50	3	3	3	0	= 9	200 295	FM
Palo Alto										
Stanford Medical Center and Affiliated Hospital										
Palo Alto Stanford Hosp Center				2	2	0	0	= 4	250-325	O
Veterans Admin										
San Francisco										
Children s	B Holman	6 025	6	1	1	0	0	= 2	250-300	FP
St Joseph s	R H Simpson	3 067	28	1	1	0	0	= 2	250-400	FM
San Francisco General	F Guy	3 778	160	4	1	0	0	= 5	220-360	O
University of California Hospitals	S C Cullen	5 404	50	9	9	2	0	= 20	243 316	
San Jose										
Santa Clara County	H Matthews	2 181	310	2	1	1	0	= 4	270-320	PM
Torrance										
Harbor General [8]	P H Torhan	4 902	79≠	4	4	4	0	= 12	273-303	FM
COLORADO										
Denver										
University of Colorado Medical Center [5]										
Colorado General	R W Virtue	3 102	200	5	5	1	0	= 11	180-205	O
Denver General	R W Virtue	3 316							179 205	
Veterans Admin [11]	F Brown	1 870	20	2	2	0	0	= 4	271 293	O
CONNECTICUT										
Bridgeport										
Bridgeport	D Maley	9 820		2	2	0	0	= 4	240-265	PM
Hartford										
Hartford [55]	R M Tovell	44 515	2 000	10	10	0	0	= 20	150-182	FP
St Francis	S J Martin	16 730	216	5	5	0	0	= 10	175-200	FP
New Haven										
Yale-New Haven Medical Center [8]										
Grace-New Haven Community	N M Greene	13 482		4	4	1	0	= 9	50-125	FM
Hospital of St Raphael [55]	M Carofalo	9 254	36	2	2	0	0	= 4	300 335	PM
Waterbury										
St Mary	W S DeWald	8 419	25	2	2	0	0	= 4	225-275	FP
DISTRICT OF COLUMBIA										
Washington										
District of Columbia General [8]		6 414	21	6	0	1	0	= 7	233 283	O
Georgetown University	T F McDermott	9 233	126	5	5	1	0	= 11	175-310	FM
George Washington University [5]	C S Coolley	12 107	336	8	7	0	0	= 15	210 285	PM
Providence	W Devlin	12 779	43	1	1	0	0	= 2	200-250	O
Washington Hospital Center [8]	W Bruner Jr	18 865	262	5	5	5	0	= 15	215-245	FM
FLORIDA										
Gainesville										
University of Florida										
Teaching Hospital and Clinics [8]	J S Craven tem	823	30	2	2	0	0	= 4	217-450	
Miami										
Jackson Memorial [8]	F G Converse	14 469		5	4	1	0	= 10	200 275	PM
GEORGIA										
Atlanta										
Emory University-Grady Memorial [55]										
Emory University	J F Steinhaus	6 364		0	3	0	0	= 3	275-245	PM
Grady Memorial	J F Steinhaus	5 760	24	4	4	0	0	= 8	100-125	FM
Augusta										
Medical College of Georgia Hospitals	P P Volpitto	7 663		7	7	0	0	= 14		
Eugene Talmadge Memorial [8]	P P Volpitto	2 461	30	4	4	0	0	= 8	250-250	
University	E J Rushia	5 705	18	3	3	0	0	= 6	200-250	O

Numerical and other references are listed on pages 811 through 814

2 ANESTHESIOLOGY—Continued

	Chief of Service or Program Director	Total Anesthetics	Consultation on Nonsurgical Patients	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Emphasis FM PM 0
ILLINOIS										
Chicago										
Illinois Masonic [8]	I Illes	6,725	2 061	1	1	0	0	= 2	115 160	FM
Michael Reese [8]	J H Bolgla	11 503	102	2	2	0	0	= 4	150 175	FP
Mount Sinai [8]	R Weil	5,877	92	3	3	0	0	= 6	225 300	PM
Northwestern University Medical Center										
Chicago Wesley Memorial	M Karp	11 373	100	2	2	0	0	= 4	100 200	FM
Passavant Memorial	I Watt	5 840		1	0	0	0	= 1	225-275	PM
Veterans Admin Research	M Karp	1 564	17	1	1	1	0	= 3	271-462	0
Presbyterian St Luke's	P Searles	12,263	62	6	6	0	0	= 12	125 150	FM
University of Chicago Clinics [8]	D Holaday	7,651	31	4	4	0	0	= 8	250-305	0
University of Illinois Research and Educational Hospitals [8]	M S Sadove	9,253		6	5	0	0	= 11	160-185	PM
Decatur										
Decatur and Macon County [8]	H J Wibbels	7,675	108	2	2	0	0	= 4	350 500	PM
Evanston										
Evanston	C A Baldwin Jr	6 773	112	1	1	0	0	= 2	225 275	PM
Hines										
Veterans Admin [8]	M Sadove	3,303		4	4	0	0	= 8	271 347	0
Joliet										
St Joseph's [107]	W A DeWitt	6,445	200	3	2	0	0	= 5	350 500	0
INDIANA										
Indianapolis										
Indiana University Medical Center and Affiliated Hospitals [8]	V K Stoelting	11 125	152	7	7	0	0	= 14	225 250	PM
Indiana University Medical Center Hospitals	V K Stoelting	1,724	10	3	0	0	0	= 3	271 347	0
Veterans Admin	G Dryden	13,535	110	3	3	0	0	= 6	269 295	PM
Marion County General										
IOWA										
Iowa City										
State University of Iowa Hospitals [8]	W K Hamilton	12 656	275	8	8	0	0	= 16	200 225	FM
Veterans Admin (Des Moines)	J L Bailey	2,471	100	3	2	0	0	= 5	271 412	PM
Veterans Admin		1 552	59							
KANSAS										
Kansas City										
University of Kansas Medical Center [8]	F Frederickson	9,213	156	4	4	1	0	= 9	125 271	PM
Wichita										
St Francis	R T Parmley	9,615	112	3	3	0	0	= 6	275 300	FP
KENTUCKY										
Louisville										
University of Louisville Medical Center	F H Conner	6,437	54	4	4	1	0	= 9	125 150	FM
Louisville General										
LOUISIANA										
New Orleans										
Charity Hospital of Louisiana [8]	J Adriani	24 100	1,000	7	7	0	0	= 14	150 175	FM
Veterans Admin	K L Bray	2,715	94	1	1	0	0	= 2	270 293	0
Ochsner Foundation [8]	G B Grant	6,971		3	3	0	0	= 6	225-250	PM
MAINE										
Bangor										
Eastern Maine General	C S Dwyer	6 307	135	1	1	0	0	= 2	125 188	FM
Lewiston										
Central Maine General	G Chapperton	4 502	45	1	0	0	0	= 1	175 210	FP
Portland										
Maine Medical Center [8]	J R Lincoln	8,548	78	2	2	2	0	= 6	175 225	FP
MARYLAND										
Baltimore										
Baltimore City Hospitals [8]	P Safar	4,608	730	3	3	0	0	= 6	200 250	FP
Johns Hopkins [58]	D W Benson	16,076		6	6	0	0	= 12	160-185	PM
University [78]	M Helrich	9,513	205	5	5	2	0	= 12	275-325	PM
MASSACHUSETTS										
Boston										
Beth Israel	P Marcus	15,450	200	8	7	0	0	= 15	208 248	FM
Boston City [78]	U H Eversole	7,291		1	1	1	0	= 3	200-250	0
Lahey Clinic [78-19]	H K Beecher	13 608	270	8	10	0	0	= 18	108-183	
Massachusetts General [78]	E A Sneddon	3,914	200	4	4	0	0	= 8	175-275	0
Massachusetts Memorial	B Etsten	2 939	53	4	4	2	0	= 10	237 337	0
New England Center [78]	L Hand, F Audin	8,898		4	3	0	0	= 7	200 235	PM
New England Deaconess [8]	E F Bartlett	3,289	71	1	1	0	0	= 2	225-275	
New England	L D Vandam	3,900	350	2	2	0	0	= 4	100 100	FM
Peter Bent Brigham [8]	L P Zentgraf	16 867	473	2	2	0	0	= 4	175-200	FM
St Elizabeth's	D I Mahler	4 707	100	1	1	0	0	= 2		
Veterans Admin (Jamaica Plain)	F C Callahan	3,387	17	2	0	0	0	= 2	170 195	FM
Cambridge				1*	1	0	0	= 2	300 300	FM
Cambridge City [78]	J Buskirk	4,890								
Mount Auburn	O Bryant	12,874	48	1	1	0	0	= 2	125-175	FP
Springfield										
Springfield	W J Martin, Jr	12,119	35	3	3	0	0	= 6	175-200	FP
Worcester										
St Vincent										
MICHIGAN										
Ann Arbor										
University [78-208]	R B Sweet	9,308		5	5	0	0	= 10	180-215	0

Numerical and other references are listed on pages 811 through 814

2 ANESTHESIOLOGY—Continued

	Chief of Service or Program Director	Total Anesthetics	Consultation on Non surgical Patients	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min	Max	Main Maintenance FM PM O
MICHIGAN—Continued											
Detroit											
Harper	A B Stearns	14 341		2	2	0	0	= 4	275	300	PM
Henry Ford [58]	P R Dumke	17 100	260	6	6	6	0	= 18	265	365	PM
Providence	N M Bittrich	6 781		1	1	0	0	= 2	410	425	PM
Wayne State University College of Medicine Affiliated Hospital											
Receiving	H C Schaefer	8 712	416	0	5	1	1	= 7	325	400	PM
Sinai [8]	F Brown	7 901	150	2	2	0	0	= 4	300	325	FM
Grand Rapids											
Butterworth [5]	W B Jensen	10 680		1	1	0	0	= 2	300	325	PM
MINNESOTA											
Minneapolis											
University of Minnesota Hospitals [8]	F H VanBergen	17 094	870	16	15	3	0	= 34	244	244	
Rochester											
Mayo Foundation [5]	A Faulconer	34 500		5	5	3	0	= 13	200	200	PM
MISSISSIPPI											
Jackson											
University of Mississippi Medical Center University	I W Fabian	4 378	50##	3	3	0	0	= 8	250	300	O
MISSOURI											
Columbia											
University of Missouri Medical Center [5]	K Brown	2 101		2	2	2	0	= 6	200	300	
St Louis											
Barnes [8]	R Dodd	17 377	50	5	3	0	0	= 8	150-		FM
Jewish	D J Dickler	6 533		1	1	0	0	= 2	200	250	FM
St Johns	S Brown	8 047		1	1	0	0	= 2	250	350	FPO
Veterans Admin	B Hatfaldi	3 259	284	2	2	0	0	= 4	271	462	O
Springfield											
St Johns [4]	O B Crawford	5 133		2	2	0	0	= 4	300	300	O
NEBRASKA											
Omaha											
University of Nebraska	J Barmore	3 009	10	1	0	0	0	= 1	225	300	PM
NEW HAMPSHIRE											
Hanover											
Mary Hitchcock Memorial [8]	R H Barrett	6 416	436	3	3	3	0	= 9	218	273	
NEW JERSEY											
Camden											
West Jersey	G I Covintree	6 838		1	1	0	0	= 2	225	250	FM
Hackensack											
Hackensack	I W Netz	7 187		1	1	0	0	= 2	150	200	FM
Jersey City											
Jersey City Medical Center	W J Gleeson	6 412	150	3	3	0	0	= 6	108	200	FM
Paterson											
St Joseph	E F Lawle	7 195	30	2	2	0	0	= 4	200	225	FP
NEW YORK											
Albany											
Albany [8]	C Landmeier	10 330	17##	5	5	0	0	= 10	195	275	PM
Buffalo General [58]	R N Terry	15 854	209##	3	3	1	0	= 7	175	200	FP
Edward J Meyer Memorial [8]	B D King	4 517		2	2	2	0	= 6	292	350	PM
Millard Fillmore [8]	E D Babbage	17 432	26	1	1	0	0	= 2	298	323	PM
Veterans Admin [8]	S I Guest	2 744	12	2	2	0	0	= 4	271	293	O
New York City											
Bellevue Hospital Center Div IV—New York University Post Graduate Medical School	F A Rovenstine	16 000	200	10	6	0	0	= 16			
Beth-El [8]	A C Goldfeder	7 287		2	1	0	0	= 3	150	200	FM
Beth Israel [58]	S G Hershey	5 580	52	4	3	0	0	= 7	175	180	PM
Bronx Municipal Hospital Center [8]	I R Orkin	10 709	155	7	7	0	0	= 14	215	215	FM
Flushing Hospital and Dispensary	E Apogi	6 028	10	1	1	0	0	= 2	175	200	FM
Harlem	H D Mayer	12 416		2	1	0	0	= 3			
Hospital for Joint Diseases [8]	A M Betcher	3 200	163	2	1	0	0	= 3	80	100	FM
Jewish [5]	I Pallin	11 700	55	6	5	0	0	= 11	100	125	FM
Kings County Hospital Center [59]	M H Harmel	10 319	200	6	6	0	0	= 12	145	195	
Lenox Hill	C Rich	7 154	400	1	1	0	0	= 2	180	200	PM
Long Island Jewish [8]	S Sarks	6 303	156	2	1	0	0	= 3	100	165	FM
Maimonides	I Holzmann	9 992	15	0	2	1	0	= 3	100	150	FM
Memorial Center for Cancer and Allied Diseases [8]	W S Howland	7 200		2	2	4	0	= 8	250	400	PM
Lane Ewing Memorial											
Methodist [58]	C Wallace	7 123	69	1	1	0	0	= 2	175	200	FP
Montefiore [58]	E R Kepes	4 000	200	3	3	1	0	= 7	207	282	PM
Mount Sinai [8]	M H Adelman	12 939		4	3	0	0	= 7	100	100	FM
New York [8]	J Artusio	18 940	600	6	6	0	0	= 12	164	266	PM
New York Medical College-Metropolitan Medical Center											
Flower and Fifth Avenue	F E Fierro	6 432	73	2	2	1	0	= 5	250	300	FM
Metropolitan	F E Fierro	4 422		6	6	0	0	= 12	145	195	FM
New York Polyclinic Medical School and Hospital [55]	J Milowsky	6 231	170	4	4	0	0	= 8	150	175	FM
Presbyterian [8]	E M Pupper	21 840	275	15	12	3	0	= 27	250	305	PM
St Catherines	F P Ansbro	3 410	42	2	2	0	0	= 4	125	150	FM
St Clares	J Lawrence	3 850	136	1	1	0	0	= 2	125	150	PM
St Josephs [8]	R A Berman	3 900	150	2	2	0	0	= 4	150	150	FM
St Lukes [8]	E Burford	6 450		3	3	0	0	= 6	125	150	FM
St Vincents [58]	R G Hicks	9 403	50	4	5	0	0	= 9	175	200	FM
Veterans Admin (Bronx) [58]	B J Ciliberti	8 617	897	4	3	0	0	= 7	270	274	O
Veterans Admin (Brooklyn) [58]	H I Lipson	2 159	102	2	2	0	0	= 4	271	293	O

Numerical and other references are listed on pages 811 through 814

2 ANESTHESIOLOGY—Continued

	Chief of Service or Program Director	Total Anesthetics	Consultation on Non-surgical Patients	Residencies Offered 1961-1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min-Max	Maintenance FM PM O
NEW YORK—Continued										
Rochester										
Genesee	E Kistler	7 166		1	1	0	0	= 2	175-325	FM
Rochester General [8]	V J Coviello	9 945		1	1	0	0	= 2	175-200	FM
St Mary's [8]	V Tofany	9,209		1	0	0	0	= 1		
Strong Memorial-Rochester Municipal Hospitals [8]	A J Gillies	8 465		4	3	0	1	= 8	166-291	O
Syracuse										
St Joseph's	C J Geiger	6 647	72	2	1	0	0	= 3	250-317	PM
State University of New York Upstate Medical Center [8]	E J Delmonico	10,194		5	5	2	0	= 12	250-316	O
Valhalla										
Grasslands [8]	H E Bishop	1 816	112	2	2	0	0	= 4	175-200	FM
NORTH CAROLINA										
Chapel Hill										
North Carolina Memorial [8]	D A Davis	4,333	157	3	3	1	0	= 7	175-266	O
Durham										
Duke [8]	C R Stephen	12,000	150	8	7	0	0	= 15	150-150	FM
Winston-Salem										
North Carolina Baptist [8]	D I Crandell	8 270	223#	1	0	0	0	= 1	166-208	PM
OHIO										
Canton										
Mercy	F C Reno	10 327		2	2	0	0	= 4	275-300	PM
Cincinnati										
Christ	L Hartenian	8 543		2	2	0	0	= 4	200-275	FM
Cleveland										
Cleveland Clinic [8]	D E Hale	9 340	17	3	3	0	0	= 6	275	
Cleveland Methropolitan General [8]	H F Kretchmer	8,184		2	2	1	0	= 5	183-258	FM
Fairview Park [8]	J E Walkowiak	8,827		2	3	1	0	= 6	250-350	PM
Huron Road [8]	J K Potter	7 905	220	4	4	2	0	= 10	300-400	FP
Mount Sinai [8]	S Katz	10 377	55	2	2	0	0	= 4	215-225	FM
St Alexis [8]	M Oppenheim	6,000	90	2	2	0	0	= 4	225-250	FMO
St Luke's [8]	B B Sankey	13 341	438	3	3	0	0	= 6	200-235	FM
St Vincent Charity [58]	D Mendelsohn	4 607	500	2	2	0	0	= 4	210-225	FP
University Hospitals of Cleveland	R A Hingson	18 239	151	6	6	0	0	= 12	150-183	PM
Columbus										
Ohio State University Hospitals [8] University	W Hamelberg	13 107	336	10	10	0	0	= 20	177-202	PM
Garfield Heights										
Marymount [8]	N G DePiero	5 132	192	3	3	0	0	= 6	200-300	FM
Toledo										
Toledo	D M Katchka	6 110	1 074	1	1	0	0	= 2	275-300	FM
Youngstown										
St Elizabeth's [58]	A J Bayuk	12,168		1	2	0	0	= 3	300-325	FM
Youngstown [58]	D W Metcalf	15 637	120	4	4	0	0	= 8	275-350	FM
OKLAHOMA										
Oklahoma City										
University of Oklahoma Medical Center [58]	J M White			5	5	2	0	= 12	200-250	PM
University Hospitals		2 015	1							
Veterans Admin										
OREGON										
Portland										
University of Oregon Medical School Hospital and Clinics [32]	F Haugen	10 082		4	4	0	0	= 8	165-215	FM
PENNSYLVANIA										
Danville										
George F Geisinger Memorial	J M Schwab	5 179		2	2	0	0	= 4	175-225	FM
Johnstown										
Conemaugh Valley Memorial [58 32]	P C Lund	9 456	767	3	3	0	0	= 6	300-250	FM
Philadelphia										
Albert Einstein Medical Center [8]		14 682	94	3	3	0	0	= 6	125-200	FM
Graduate Hospital of the University of Pennsylvania	H H Stone	5 163	166	3	3	0	0	= 6	100-100	FM
Hahnemann Medical College and Hospital	A J Catenacci	10 566	35	4	4	1	0	= 9	250-250	FM
Hospital of the University of Pennsylvania [58]	R Dripps	11 592	300	8	8	8	0	= 24	150-333	PM
Children's	I Bachman	3 517		2	0	0	0	= 2	125-150	FM
Jefferson Medical College [58]	L J Hampton	10 979	160	3	4	3	0	= 10	150-325	PM
Pennsylvania	M V Troncelliti	9 971	214	1	0	0	0	= 1	100-100	FM
Philadelphia General	M Deming	5 414	124	3	3	0	0	= 6	318-353	FM
Presbyterian [58]	S Schotz	5 335	70	2	2	0	0	= 4	233-290	FM
Temple University [8]	I W Krumperman	9 661	76	4	4	2	0	= 10	175-225	PM
Pittsburgh										
Allegheny General	R I Patterson	10 913	7 000	3	3	0	0	= 6	200-225	FM
Mercy [8]	F F Foldes	10 513	837	4	4	2	0	= 10	233-250	FM
Montefiore [339]	I G David	7 087	150	2	2	0	0	= 4	225-250	FM
St Francis General Hospital and Rehabilitation Institute	G J Thomas	10 875	68	2	2	0	0	= 4	240-250	FP
Sayre										
Robert Packer [8]	W Brehm	6 128	45	2	1	1	0	= 4	235-325	PM
West Reading										
Reading	M Kerry	9 350	65	2	2	0	0	= 4	225-300	FM
PUERTO RICO										
Ponce										
Hospital de Damas	F C Yordan	2 305	190	1	1	0	0	= 2	225-225	FM
San Juan										
San Juan City	F Gonzalez	3 685		2	2	0	0	= 4	175-250	FM
RHODE ISLAND										
Providence										
Rhode Island [58]	M Saklad	13,045	153	3	3	3	0	= 9	125-175	FM

Numerical and other references are listed on pages 811 through 814

2 ANESTHESIOLOGY—Continued

	Chief of Service or Program Director	Total Anesthetics	Consultations on Nonsurgical Patients	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	F Main M Maintenance FM PM O
SOUTH CAROLINA										
Charleston										
Teaching Hospitals of the Medical College of South Carolina	J F Mahaffey	6 869	3 398	3	3	0	0	= 6	200-200	PM
TENNESSEE										
Chattanooga										
Baroness Erlanger	R Baldwin	8 1 0	4 501	4	2	0	0	= 6	375 350	
Knoxville										
University of Tennessee Memorial Research Center and Hospital [5]	W F Powell	3 299	29	1	1	0	0	= 2	320-340	FM
Memphis										
City of Memphis Hospital [5]	W H L Dornette	12 027		4	0	0	0	= 4	150-200	FP
Nashville										
Vanderbilt University	B H Robbins	6 569	100	3	3	1	0	= 7	100 125	FM
TEXAS										
Dallas										
Parkland Memorial	M T Jenkins	11 566		5	5	2	0	= 12	225-275	PM
Fort Worth										
Harris	A N Heinrichs	12 244		1	1	0	0	= 2	300 325	FP
Galveston										
University of Texas Medical Branch Hospitals [5]	C Allen	8 064	258	6	6	3	0	= 15	160 160	FP
Houston										
Baylor University College of Medicine Affiliated Hospital [5]										
Jefferson Davis	A S Keats	4 786	25	4	4	0	0	= 8	125-165	FM
Methodist	P H Chalmers	10 490							100-175	
Veterans Admin	W H Mannheimer	4 782	54	3	3	0	0	= 6	270 293	PM
Hermann	I F Schuhmacher Jr	17 866	2 469	2	2	0	0	= 4	125 300	PM
St Joseph's	E Hoeflich	12 760		0	1	0	0	= 1	270-270	PM
University of Texas M D Anderson Hospital and Tumor Institute	W Derrick	4 362		3	3	0	0	= 6	220-300	PM
Temple										
Scott and White Memorial	C H Gillespie	5 422	3 959	2	2	0	0	= 4	300-300	O
UTAH										
Salt Lake City										
University of Utah Affiliated Hospitals [5 3 1]	C Ballinger	25 934	521	6	6	1	0	= 13	275-350	O
VERMONT										
Burlington										
University of Vermont Medical Center [5]										
De Goesbriand Memorial	E Mill	3 194	1 045						208-208	
Mary Fletcher	I Abajian Jr	4 246	50	2	4	0	0	= 6	166	FM
White River Jct										
Veterans Admin	R E Lapointe	1 425	12	1	1	0	0	= 2	218 218	
VIRGINIA										
Charlottesville										
University of Virginia	D W Eastwood	5 856		3	2	0	0	= 5	75-150	FM
Richmond										
Medical College of Virginia—Hospital Division [5]	W E Pembleton	14 104		2	3	0	0	= 5	200 200	FM
Veterans Admin	C G Lynch	3 528	162	1	1	0	0	= 2	271-412	PM
WASHINGTON										
Seattle										
Doctors [5]	J I Owen	4 890		1	1	0	0	= 2	250 300	FM
Swedish [5]	L H Mousel	12 431		2	2	0	0	= 4	225-313	FP
University of Washington Affiliated Hospitals										
Children's Orthopedic	K Eather	3 856	8±±							
King County Hospital Unit No 1 (Harborview)	L F Morris	3 229	14±±	6	6	4	0	= 16	150 250	FM
Veterans Admin	L F Morris	1 257		1	0	1	0	= 2	293 293	
Virginia Mason [5 3 6]	D C Moore	6 668	508	3	3	0	0	= 6	175-225	FP
Tacoma										
Tacoma General [5]	J I Bonica	6 336		4	4	0	0	= 8	200 300	FM
WEST VIRGINIA										
Wheeling										
Ohio Valley General	D E Greeneltch	6 983	1 445	3	3	0	0	= 6	300 375	
WISCONSIN										
Madison										
University Hospitals [5]	O S Orth	576	135	6	6	0	0	= 12	160-200	FM
Milwaukee										
Milwaukee County	J J Jacoby	5 943		4	4	0	0	= 8	229 282	
Veterans Admin (Wood)	S W Gorens	3 691	116	3	0	0	0	= 3	271 293	PM

3 AVIATION MEDICINE

The programs in Aviation Medicine which have been approved by the Council and the American Board of Preventive Medicine through the Residency Review Committee for Preventive Medicine will be found listed under Preventive Medicine page 762

Numerical and other references are listed on pages 811 through 814

4 CARDIOVASCULAR DISEASE

Residency programs in the following hospitals have been approved up to June 30, 1961, for ONE to TWO years training by the Council and the Subspecialty Board for Cardiovascular Disease of the American Board of Internal Medicine See special announcement, page 817

Hospitals, 72, Residencies, 142

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Maintenance FM PM O
UNITED STATES ARMY													
CALIFORNIA													
Letterman General San Francisco	L F Parmley	70	1 398	27	78	4,002	1	0	0	0	= 1		
COLORADO													
Fitzsimons General Denver	J A Orbison	31	459	16	81	6,356	1	0	0	0	= 1		
DISTRICT OF COLUMBIA													
Walter Reed General Washington	T W Inmon	69	779	37	84	6,623	1	1	0	0	= 2		
TEXAS													
Brooke General San Antonio	R B Dickerson	32	554	61	75	8,384	1	0	0	0	= 1		
UNITED STATES NAVY													
CALIFORNIA													
U S Naval, San Diego	J E Gorman	133	854	82	89	4,897	1	0	0	0	= 1		
MARYLAND													
U S Naval Bethesda	R I Pearson	23	699				1	0	0	0	= 1		
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE													
DISTRICT OF COLUMBIA													
Freedmen's, Washington	J B Johnson					2,454	0	0	1	0	= 1	305 417	PM
NONFEDERAL AND VETERANS ADMINISTRATION													
CALIFORNIA													
Duarte City of Hope Medical Center	B J Allenstein	4	88	4	75	952	2	0	0	0	= 2	400 400	O
Long Beach Veterans Admin	L T Lawrence	80	589	102	77	331	0	0	2	0	= 2	347 462	O
Los Angeles Los Angeles County	G Griffith					1 704	0	0	0	1	= 1	319 319	PM
Veterans Admin	M L Pearce	66	978	118	74	1,922	0	0	1	0	= 1	348 348	PM
San Francisco University of California Hospitals	M Sokolow						0	1	0	0	= 1	243 426	
COLORADO													
Denver General Rose Memorial	A Ravin	31	787#	78	40		1	0	0	0	= 1	265-265	FM
CONNECTICUT													
West Haven Veterans Admin	M Calabresi						0	0	1	0	= 1	271 347	
DELAWARE													
Wilmington Delaware	J R Durham	88	2,512#	571	60	2,798	0	0	0	1	= 1	220-280	FM
DISTRICT OF COLUMBIA													
Washington George Washington University	J M Evans	25	810	46	58	6,903	3	3	0	0	= 6	250 350	PM
FLORIDA													
Miami Jackson Memorial [112]	R J Boucek		1,407	98	34	4,111	0	1	1	1	= 3		PM
GEORGIA													
Atlanta Emory University	R B Logue	11	709#	66	47		0	0	3	0	= 3†	275 265	PM
St Joseph's Infirmary	T S Claiborne	20	892	47	58	1,135	1	0	0	0	= 1	300 500	PM
ILLINOIS													
Chicago Children's Memorial	R A Miller		411	56	79	1,672							
Michael Reese	L N Katz	48	1,387	160	58	2,701	5	5	0	0	= 10	125-200	PM
Mount Sinai	A Luisada						0	0	1	0	= 1	275 275	PM
INDIANA													
Indianapolis Marion County General	K Kohlstaedt	14	352	90	33	3 409	0	0	2	0	= 2	300 400	PM
St Vincent's	A B Richter	20	433	15	80	380	1	1	1	0	= 3	275 425	PM
KANSAS													
Kansas City University of Kansas Medical Center	E G Dimond	12	470	20	70	1,052	0	0	0	3	= 3	125 175	PM
LOUISIANA													
New Orleans Ochsner Foundation	H M Horack	6	215	19	80	2 727	1	0	0	0	= 1	250 300	PM
MAINE													
Portland Maine Medical Center	R Martin					1 847	1	0	0	0	= 1	175-175	FP
MASSACHUSETTS													
Boston Beth Israel			Inc in Int Med				0	4	4	0	= 8†		
Peter Bent Brigham			Inc in Int Med										
West Roxbury Veterans Admin	D Littmann	8	127	2	100	457	0	0	2	1	= 3	227 375	O
Worcester St Vincent	T T Brosnan	29	972	111	48	705	1	0	0	0	= 1	300-300	FM

Numerical and other references are listed on pages 811 through 814

4 CARDIOVASCULAR DISEASE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Main Maintenance FM PM O
MICHIGAN													
Detroit													
Henry Ford	J W Keye	6	2 394	177	78	44 455	0	0	4	0	= 4	265-365	PM
MINNESOTA													
Rochester													
Mayo Foundation			Inc in Int Med									200 200	
NEBRASKA													
Omaha													
University of Nebraska	R Grissom	26	916			492	0	1	1	0	= 2	275 400	PM
NEW JERSEY													
Newark													
Newark Beth Israel	J Kaufman						1	0	0	0	= 1	125-125	FM
Paramus													
Bergen Pines County	S B Reich	24	132	35	42	110	1	0	0	0	= 1	350-350	O
NEW YORK													
Buffalo													
Buffalo General	F J Lippschutz	187	4 995±	421	54	16 570	0	0	1	0	= 1	200 200	FP
Irvington													
Irvington House	H F Wood		303	1	100	7 877	0	1	1	1	= 3	250 250	FM
New York City													
Jewish							0	0	1	0	= 1	125-125	FM
Lenox Hill	C Kolmann		762	82	37	2 936	1*	1	0	0	= 2†	416	O
Memorial Center for Cancer and Allied Diseases	J S LaDue						0	0	1	0	= 1	200 300	PM
James Ewing Memorial													
Montefiore	J B Schwedel												
Mount Sinai	C K Friedberg	74	1 593	120	60	6 381	0	0	2	0	= 2	100-100	FM
St Luke's	T B Vanitallie						2	0	0	0	= 2	150 175	FM
Roslyn													
St Francis Hospital and Sanitorium	W J Noble	113	709	52	88	831	0	0	3	0	= 3	250-250	FM
Valhalla													
Grasslands			Inc in Int Med	32	31	1 142	0	0	1	0	= 1	175 225	FM
NORTH CAROLINA													
Chapel Hill													
North Carolina Memorial	F Craige	12	407	45	60	1 113	3	0	0	0	= 3	375-500	
Durham													
Duke	F S Orgain	13	454	14	71	726	0	0	0	2	= 2	200 300	O
OHIO													
Cincinnati													
University of Cincinnati College of Medicine Hospital Group													
Cincinnati General	J McGuire		Inc in Int Med										
St Mary's	R S Green						1*	1	0	0	= 2†	300-300	FM
Cleveland													
Cleveland Clinic	A C Ernstene	57	1 811	123	67	11 287	3	3	0	0	= 6		
University Hospitals of Cleveland	W Pritchard						0	0	2	0	= 2	250 250	PM
Columbus													
Ohio State University Hospitals													
University Hospitals	J M Ryan						0	0	2	0	= 2	252 252	PM
White Cross	R W Klessane	2	78±	30	30		1	0	0	0	= 1	290-340	PM
OKLAHOMA													
Oklahoma City													
University of Oklahoma Medical Center	S Wolf												
University Hospitals			Inc in Int Med										
Veterans Admin													
OREGON													
Portland													
Veterans Admin	J K Goldberg	98	649	78	80	779	0	0	2	0	= 2	270-347	PM
PENNSYLVANIA													
Philadelphia													
Graduate Hospital of the University of Pennsylvania	S Bellet	8	241	25	36	287	1	0	0	0	= 1	100-100	FM
Hahnemann Medical College and Hospital	W Likoff			87	73	2 420	4	4	0	0	= 8	200-250	FM
Pennsylvania	J B Vander Veer					3 229	2	0	0	0	= 2	20 40	
Philadelphia General	S Bellet					2 673	0	0	3	0	= 3	265 265	FM
Presbyterian	J R Kitchell	16	404	36	61	775	2	0	0	0	= 2	235 290	FM
Temple University	L A Soloff					1 632	2	2	0	0	= 4	175-200	PM
Veterans Admin	B H Pastor	80	1 180	100	81		0	0	1	0	= 1	270-462	O
Pittsburgh													
Health Center Hospitals of the University of Pittsburgh School of Medicine	J D Myers		Inc in Int Med										
St Francis General Hospital and Rehabilitation Institute	A P D Zmura	17	644			589	0	0	0	1	= 1	240-305	FP
RHODE ISLAND													
Providence													
Miriam	N J Kiven						1	0	0	0	= 1	250 250	FM
Rhode Island	F B Cutts					8 916	2	0	0	0	= 2	175-175	FM
TEXAS													
Galveston													
University of Texas Medical Branch Hospitals			Inc in Int Med									160-160	FP
VIRGINIA													
Richmond													
Veterans Admin	F A Wade	47	859	106	74	2 350	0	0	2	0	= 2	271-412	PM
WISCONSIN													
Madison													
University Hospitals	C W Crumpton	8	455	28	79	2 858	3	1	1	0	= 5	200-200	FM

Numerical and other references are listed on pages 811 through 814

5 CHILD PSYCHIATRY

The programs in Child Psychiatry which have been approved by the Council, the American Board of Psychiatry and Neurology and its Committee on Certification in Child Psychiatry, through the Residency Review Committee for Psychiatry and Neurology, are listed following the programs in Psychiatry, and begin on page 774

6 DERMATOLOGY

Residency programs in the following hospitals have been approved by the Council and the American Board of Dermatology, Inc, through the Residency Review Committee for Dermatology, as offering acceptable training in the specialty Those hospitals showing TWO years of approval and marked with an asterisk (*) offer an assured THIRD year of training at another hospital approved for such training

Hospitals, 78, Residencies, 320

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Pay Maintenance FM PM O	Length of Approved Program (Years)
UNITED STATES ARMY														
CALIFORNIA														
Letterman General San Francisco	R M Williams	6	374			12,450	1	1	1	0	= 3			3
DISTRICT OF COLUMBIA														
Walter Reed General Washington	R S Higdon	12	206	1	100	19,127	1	1	1	0	= 3			3
TEXAS														
Brooke General San Antonio	G Prazak	11	211			48 665	2	2	2	0	= 6			3
UNITED STATES NAVY														
CALIFORNIA														
U S Naval San Diego [87]	C W Norman	22	276			13 919	1	2	1	0	= 4			2*
PENNSYLVANIA														
U S Naval Philadelphia	J H Lockwood	12	229			5,693	2	1	2	0	= 5			2*
UNITED STATES PUBLIC HEALTH SERVICE														
MARYLAND														
National Institutes of Health, Bethesda														1
NEW YORK														
U S Public Health Service New York City (Stapleton) [88]	J I Hearn	32	590			9,420	1	1	1	0	= 3			3
FEDERAL AND VETERANS ADMINISTRATION														
ALABAMA														
Birmingham														
University of Alabama Medical Center University Hospital and Hillman Clinic	R O Noojin	2	51			24 237	1	2	1	0	= 4	175 205	FM	3
Fairfield														
Lloyd Noland [86]	P G Reque	2	78			5,882	1	0	0	0	= 1	250 250	FM	1
ARKANSAS														
Little Rock														
University of Arkansas Medical Center	C J Dillaha					944	2	0	0	0	= 2	170-204 204	O O	1
University														
Veterans Admin														
CALIFORNIA														
Long Beach														
Veterans Admin	S W Becker	35	219	3	100	6,936	2	2	2	0	= 6	271 462	O	3
Los Angeles														
Los Angeles County	M C Zimmerman					13 078	2	1	1	0	= 4	273 303	PM	3
	J K Fisher	25	720	15	47	5,642	2	2	2	0	= 6	240 314	FP	3
	T H Sternberg	4	74	3	100	16 019	3	4	0	0	= 7	271 348	PM	3
University of California	F T Wright	50	936			3,858	1	0	0	0	= 1	215-215	PM	2
Veterans Admin [86]	M Couperus	1	28											
White Memorial														
Palo Alto														
Stanford Medical Center and Affiliated Hospitals	E M Farber	1	31			2 606	2	2	0	0	= 4	250 325	O	3
Palo Alto-Stanford Hospital Center														
Veterans Admin														
San Francisco														
University of California Hospitals	R B Rees	1	45			7 692	1	2	1	0	= 4	243 316		3
COLORADO														
Denver														
University of Colorado Medical Center Colorado General	O S Philpott	1	25			3 897	1	1	0	0	= 2	180 190	O	3
CONNECTICUT														
New Haven														
Yale-New Haven Medical Center Grace-New Haven Community	A B Lerner					4,507	1	1	0	0	= 2	50 100	FM	3
FLORIDA														
Miami														
Jackson Memorial	H Blank		150	2	50	5 318	3	2	2	0	= 7	200 275	PM	3
ILLINOIS														
Chicago														
Cook County	T Cornbleet	28	352	13		14 746	2	1	0	0	= 3	140 140	FM	3
Northwestern University Medical Center	H Rattner					5 183	2	2	2	0	= 6	200 280	O	3
Veterans Admin Research	S Rothman	9	214	3	100	7 339	3	3	3	0	= 9	250 305	O	3
University of Chicago Clinics	A Rostenberg	4	45	6	100	11 495	2	0	2	0	= 4	160 215	PM	3
University of Illinois Research and Educational Hospitals	A Rostenberg	88	584	58	66	156	2	2	0	0	= 4	271 293	O	
Veterans Admin (Hines)														

Numerical and other references are listed on pages 811 through 814

6 DERMATOLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include Transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Main Mainteinance FM PM O	Length of Approved Program (Years)
INDIANA														
Indianapolis														
Marion County General	B Booth	4	79			6 770	1	1	1	0	= 3	269 321	PM	3
IOWA														
Iowa City														
State University of Iowa Hospital	R Nomland	15	485	3	67	15 851	1	1	1	0	= 3	200-255	FM	3
LOUISIANA														
New Orleans														
Charity Hospital of Louisiana	V J Derbe C B Kennedy V M Henington	22	422	3	100	26 154	4	4	2	0	= 10	125-175	FM	3
MARYLAND														
Baltimore														
Johns Hopkins		Inc in Int Med	273##			5 601								3
University	H M Robinson Jr	5	250			12 300	1	1	1	0	= 3	200-250	PM	3
Fort Howard														
Veterans Admin	M Sullivan	5	56			1 180	1	1	0	0	= 3	271 271	O	3
MASSACHUSETTS														
Boston														
Boston City	B Appel	10	139			15 499	2	1	1	0	= 4	158-175	FM	3
Massachusetts General	T B Fitzpatrick					10,568	3	1	0	0	= 4	168-183	FM	3
Massachusetts Memorial	H McCon					4 741	2	2	2	0	= 6	175-275	O	3
MICHIGAN														
Ann Arbor														
University	A C Curtis	19	556	6	50	6 557	5	5	5	0	= 15	180-250	O	3
Detroit														
Henry Ford	C S Livingood	19	508			41 849	5	5	4	0	= 14	265-265	PM	3
Receiving	H Pinkus		25			10 936	2	2	2	0	= 6	200-350	O	3
MINNESOTA														
Minneapolis														
Minneapolis General	C W Laymon	6	167	2		4 681	1	1	0	0	= 2	235-235	FM	3
University of Minnesota Hospital	F W Lynch	5	69			4 100	1	1	1	0	= 3	244 244		3
Veterans Admin	I Fisher	18	312	1	100	1 440	2	2	0	0	= 4	271-462	O	3
Rochester														
Mayo Foundation ###	L A Brunsting		898	4	100		5	5	5	4	= 19	200-333	PM	3
St Paul														
Ancker	H Ravits	6	96	1		3 693	0	1	0	0	= 1	235-235	FM	3
MISSOURI														
St Louis														
Barnes	H Eisen C Lane					5 503	1	1	0	0	= 2	50 175	FM	3
NEW HAMPSHIRE														
Hanover														
Mary Hitchcock Memorial	O F Jillson	6	169			9 220	1	1	1	0	= 3	218-273	O	3
NEW YORK														
Buffalo														
Edward J Meyer Memorial	E D Osborne	6	87	2	100	5 570	1	1	1	0	= 3	292 332	PM	3
Roswell Park Memorial	H L Traenkle	3	49	2	100	2 992	0	0	1	0	= 1	334 351	O	1
New York City														
Bellevue Hospital Center Div IV—New York University Post Graduate Medical School	M Leider	47	331	9	67	24,954	2	3	2	0	= 7			3
Kings County Hospital Center	L Frank	21	346	6		12 499	2	0	0	0	= 2	145-195		3
Mount Sinai	S M Peck	4	24			6 987	1	1	0	0	= 2	100-100	FM	3
New York	G Lewis					9 255	1	0	0	0	= 1	164 164		3
New York University Medical Center University	M B Sulzberger	4	131	5		70 923	5	0	0	0	= 5	145-195	FM	3
Presbyterian	C T Nelson	[illegible]	127			33 077	2	1	1	0	= 4	250-308	PM	3
St Luke's	L P Barker					7 779	1	1	0	0	= 2	125-150	FM	2*
Veterans Admin (Bronx)	H Shatin	41	495			65	1	1	2	0	= 4	270 347	O	3
Veterans Admin (Manhattan)	P Michaelides	35	430	1		55	2	2	2	0	= 6	271 348	O	2*
NORTH CAROLINA														
Chapel Hill														
North Carolina Memorial	F M Hitch	1	46			2 927	1	1	0	0	= 2	175-266	O	2
Durham														
Duke	F L Callaway	4	160			2 076	1	1	1	0	= 3	200-300	O	3
OHIO														
Cincinnati														
University of Cincinnati College of Medicine Hospital Group Cincinnati General	L Goldman	19	206	1	100	3 857	2	2	2	0	= 6	125-200	FM	3
Cleveland														
Cleveland Clinic	J R Hendrick	11	329	7	50	14 797	1	1	2	0	= 4	275-		3
Cleveland Metropolitan General	R C Rauchkolb	5	58	1		4 799	1	1	1	0	= 3	150-217	FM	3
University Hospitals of Cleveland	R Stoughton	4	92			5,850	2	1	1	0	= 4	150-250	PM	3
OKLAHOMA														
Oklahoma City														
University of Oklahoma Medical Center University Hospitals	J H Lamb	2	68			2 544	2	1	1	0	= 4	200 255	PM	3
Veterans Admin	H A Foerster	6	192											

Numerical and other references are listed on pages 811 through 814

6 DERMATOLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	FM Main Maintenance FM PM O	Length of Approved Program (Years)
OREGON														
Portland														
University of Oregon Medical School Hospitals and Clinics	W C Lobitz, Jr	4	103			6,838	2	2	1	0	= 5	165 215	FM	3
PENNSYLVANIA														
Danville														
George F Geisinger Memorial	R F Dickey	1	56			12,451	1	0	0	0	= 1	175 225	FM	3
Philadelphia														
Graduate Hospital of the University of Pennsylvania	H Beerman		44			3 533	1	1	1	0	= 3	75 100	FM	3
Hahnemann Medical College and Hospital	H I Hurley					1 629	1	0	0	0	= 1	75 75	FM	1
Hospital of the University of Pennsylvania	D Pillsbury	5	129	1	100	4 989	4	4	4	4	= 16	125 192		3
Jefferson Medical College	H A Luscombe	1	30			3 488	2	0	0	0	= 2	100 125	PM	2
Philadelphia General	C Burgoon D Pillsbury	10	160	2	50	3,587	2	2	0	0	= 4	128 212	FM	2
Temple University Medical Center Skin and Cancer Hospital Unit	C F Burgoon, Jr	17	520	1		21,270	3	0	1	0	= 4	175 225	O	3
TEXAS														
Galveston														
University of Texas Medical Branch Hospitals	I F Mullen	8	188	2	100	6,804	2	2	2	0	= 6	160 160	FP	3
Houston														
Baylor University College of Medicine Affiliated Hospitals [367]	J R Seale	18	307	4	50	4,421	1	1	1	0	= 3			3
VIRGINIA														
Charlottesville														
University of Virginia	E P Cawley	6	170			8 749	2	2	1	0	= 5	75 150	FM	3
Richmond														
Medical College of Virginia-Hospital Division	A Pepple	6	260			5,482	1	1	0	0	= 2	150 150	FM	2
WISCONSIN														
Madison														
University Hospitals	S A M Johnson	4	135	4	100	4 209	1	1	1	0	= 3	100 200	FM	3
Marshfield Clinic (Marshfield)														
aukee														
Veterans Admin (Wood) [388]	D W Kersting	19	312	6	83	9 354	1	0	0	0	= 1	271 347	PM	3

7 GASTROENTEROLOGY

Residency programs in the following hospitals have been approved up to June 30, 1961, for ONE to TWO years of training by the Council and the Subspecialty Board for Gastroenterology of the American Board of Internal Medicine **See special announcement, page 817**

Hospitals, 41, Residencies, 73

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	FM Main Maintenance FM PM O
UNITED STATES AIR FORCE													
TEXAS													
U S Air Force, San Antonio													
UNITED STATES ARMY													
CALIFORNIA													
Letterman General San Francisco	E I Kehoe		29	673	12	70	4,005	1	0	0	0	= 1	
DISTRICT OF COLUMBIA													
Walter Reed General Washington	B H Sullivan		23	351	15	73	3,179	1	0	0	0	= 1	
TEXAS													
Brooke General San Antonio	E D Palmer		33	501	22	82	1,521	1	0	0	0	= 1	
NONFEDERAL AND VETERANS ADMINISTRATION													
CALIFORNIA													
Long Beach													
Veterans Admin	S J Stempien		74	516	73	79	2 145	0	0	2	0	= 2	317 462	O
Los Angeles													
Veterans Admin	M I Grossman		70	884	71	82	1 571	0	0	1	0	= 1	318 318	PM
San Francisco													
University of California Hospitals				Inc in Int Med									
CONNECTICUT													
New Haven													
Yale-New Haven Medical Center	H M Spiro					903	0	3	2	0	= 5	300 400	O
Grace-New Haven Community	H M Spiro						0	0	2	1	= 3	347 412	
Veterans Admin (West Haven)													

Numerical and other references are listed on pages 811 through 814

7 GASTROENTEROLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min	Stipend per Month: Max	Main Maintenance PM O
ILLINOIS														
Chicago														
Cook County	F Steigmann					3 729	1	1	0	0	= 2	140	140	FM
Northwestern University Medical Center Veterans Admin Research	F C Fenter	16	144				0	0	1	2	= 3	271	462	O
INDIANA														
Indianapolis														
Marion County General	B D Rosenak	8	160	13	54	987	0	0	1	0	= 1	300	400	PM
KANSAS														
Kansas City														
University of Kansas Medical Center	A Klotz	11	303	14	75	550	0	0	0	1	= 1	175	175	PM
LOUISIANA														
New Orleans														
Ochsner Foundation	W D Davis	14	520	7	100	2 824	1	0	0	0	= 1	250	300	PM
Touro Infirmary	M Kaplan		816	4	50	1 372	1	1	0	0	= 2	125	150	FP
MASSACHUSETTS														
Boston														
Beth Israel	J Zetzel						1	0	0	0	= 1	167	250	O
Lahey Clinic	F D Kiefer	6	1 619	8	38	20 664	0	0	0	8	= 8	200	200	O
Massachusetts Memorial	F J Ingelfinger		Inc in Int Med			664								
MICHIGAN														
Ann Arbor														
University Hospital	H M Pollard		Inc in Int Med				0	0	0	2	= 2	275	275	O
Detroit														
Henry Ford	J C Mateer	55	1 252	33	61	29 036	0	0	4	0	= 4	265	365	PM
MINNESOTA														
Rochester														
Mayo Foundation			Inc in Int Med									200		
NEW JERSEY														
Paramus														
Bergen Pine County	A I Friedman	70	113	25	20	44	0	0	1	0	= 1	300	300	O
NEW YORK														
New York City														
Jewish	M Matzner		Inc in Int Med			877	0	0	1	0	= 1	125	125	FM
King County Hospital Center	L W Richna		Inc in Int Med				2	0	0	0	= 2	265	265	FM
Mount Sinai	H D Janowitz	39	1 190	48	50	4 885	0	0	2	0	= 2	100	100	FM
New York Polyclinic Medical School and Hospital	I A Feder	7	184	12	25	727	1	0	0	0	= 1	150	150	FM
Veterans Admin (Brooklyn)	J B Gabriel	40	50	32	69	572	1	0	0	0	= 1	347	412	O
NORTH CAROLINA														
Durham														
Duke	J M Ruffin	7	346	1	100		0	0	1	2	= 3	200	300	O
Winston Salem														
North Carolina Baptist	D Carver		Inc in Int Med			774	3	0	0	0	= 3	169	208	PM
OHIO														
Cincinnati														
University of Cincinnati Hospital Group Cincinnati General	J Schiff		Inc in Int Med											
Cleveland														
Cleveland Clinic	C H Brown	15	830	35	63	10 146	1	0	0	0	= 1	350	350	
Veterans Admin	H P Roth	62	810	37	68	180	0	0	0	2	= 2	271	462	PM
Columbus														
Ohio State University Hospitals University Hospital	C I De Jor			12	55	1 489	0	0	1	0	= 1	252	252	PM
OREGON														
Portland														
Veterans Admin	M C Goldman	18	398	11	80	208	0	0	1	0	= 1	270	347	PM
PENNSYLVANIA														
Philadelphia														
Graduate Hospital of the University of Pennsylvania	H I Bockus	32	964	35	60	1 097	2	0	0	0	= 2	75	150	FM
Hospital of the University of Pennsylvania	T Machella		Inc in Int Med			3 844	2	2	2	0	= 6	150	200	
Jefferson Medical College	C W Wirts	20	654			902	1	0	0	0	= 1	100	150	PM
Temple University	H Shay		Inc in Int Med			463	2	0	0	0	= 2	175	175	PM
TENNESSEE														
Memphis														
Veterans Admin	M I Gompertz	69	1,138	31	90	346	1	0	0	0	= 1	412	412	PM
VIRGINIA														
Richmond														
Veterans Admin	F A Wade	38	708	22	82	1 750	0	0	2	0	= 2	271	412	PM
WISCONSIN														
Milwaukee														
Veterans Admin (Wood)	J I Levin	55	785	41	70	1,059	0	0	1	0	= 1	347	412	PM

Numerical and other references are listed on pages 811 through 814

8 GENERAL PRACTICE

Residency programs in the following hospitals have been approved by the Council and the American Academy of General Practice, through the Residency Review Committee for General Practice, as offering acceptable training in this field

Hospitals, 185, Residencies, 838

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min	Max	FM Maintenance FM PM O	Length of Approved Program (Years)
UNITED STATES AIR FORCE															
ALABAMA															
U S Air Force, Montgomery	I L Foley	284	5 758	91	79	56,913	2	2	0	0	= 4				2
DISTRICT OF COLUMBIA															
U S Air Force, Washington	M W Steel, Jr	205	5 907	62	73	168 713	2	2	0	0	= 4				2
MISSISSIPPI															
U S Air Force, Biloxi	F R Henry	285	8 487	48	60	207,226	3	3	0	0	= 6				2
OHIO															
U S Air Force Dayton		278	5,725	49	67	243 018	4	4	0	0	= 8				2
TEXAS															
U S Air Force San Antonio															2
UNITED STATES ARMY															
NEW JERSEY															
Walson Army Fort Dix															2
UNITED STATES PUBLIC HEALTH SERVICE															
MICHIGAN															
U S Public Health Service, Detroit	N J Galluzzi, A R Valle	57	2 531	22	77	21 141	3	3	0	0	= 6				2
TEXAS															
U S Public Health Service Galveston															2
VIRGINIA															
U S Public Health Service Norfolk	F T Zinn	186	3 606	73	59	47 328	3	3	0	0	= 6	648 665			2
NONFEDERAL AND VETERANS ADMINISTRATION															
LABAMA															
rmingham Carraway Methodist	C Neville	199	11,684	163	23		1	0	0	0	= 1	250 300		FM	2
ARIZONA															
Phoenix Good Samaritan	I B Smith	64	9	73	51	1 150	1	1	0	0	= 2	350 400		PM	2
Maricopa County General	H M Bunch	78				28 160	6	6	0	0	= 12	373 392		PM	2
Tucson St Mary s	L Hirsch	27		9	75		2	0	0	0	= 2	200 200		FM	2
ARKANSAS															
Little Rock University of Arkansas Medical Center [10]	J T Riggin Jr						9	6	0	0	= 15	170 180		O	2
CALIFORNIA															
Arlington General Hospital of Riverside County	G J Anday	136	2 811	31	22	12,248	7	0	0	0	= 7	441 441		PM	2
Bakersfield Kern County General	J F Barnard	221	8 502	472	67	90 639	1	0	0	0	= 1	350 425		O	2
Long Beach St Mary s Long Beach	W L Thompson	235	17 692	298	50	22 286	2	2	0	0	= 4	300 320		FM	2
Martinez Contra Costa County			416#	25	76		10	0	0	0	= 10	481 481		PM	2
Modesto Stanislaus County	A S Westphal	276	5 435	390	31	44 713	4	4	0	1	= 9	500 500		PM	2
Sacramento Sacramento County	D M Ernest	780	13 422	1 196	46	95,205	6	6	0	0	= 12	399 480		FM	2
Salinas Monterey County	W A Cassidy	248	3 683	249	75	31 827	10	0	0	0	= 10	500		FM	2
Santa Barbara Santa Barbara General	D M Caldwell	226	2 622	189	54	11 022	3	2	0	0	= 5	450 450		FM	2
Santa Rosa Sonoma County	H D Stalley	268	3 691	395	30	28 726	4	4	0	0	= 8	425 475		PM	2
Ventura General Hospital Ventura County	J A Daly	235	5 449	72	23	34 485	5	5	0	0	= 10	131 465		FP	2
COLORADO															
Colorado Springs Penrose	C S Gydesen	8	366#	6	50	600	2	2	0	0	= 4	200 200		FM	2
St Francis	R W Urich	159	9 800	233	54	5 551	2	1	0	0	= 3	200 200		FM	2
Denver Mercy	F Lauvetz	48	2 951	56	34		3	0	0	0	= 3	300 300		PM	2
St Joseph's	F B McGlone	220	8 325	390	79	117 673	1	1	0	0	= 2	200 225		FM	2
University of Colorado Medical Center Colorado General	C W Eisele					2 942	8	8	0	0	= 16	180 195		O	
Denver General	C W Eisele	309	15,980	363	38	1,242	4	4	0	0	= 8	179 205			
Pueblo St Mary Corwin	F W Barrows											285 360		PM	2

Numerical and other references are listed on pages 811 through 814

8 GENERAL PRACTICE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include Transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Main Affiliation	Length of Approved Program (Years)
CONNECTICUT														
Bridgeport														
Bridgeport	E R Connors	52	2 025	180	36	1 093	2	2	0	0	= 4	240 260	FM	2
Torrington														
Charlotte Hungerford	M E Globbe	95	5 819	204	24	2 065	4	0	0	0	= 4	200 200	FM	2
DELAWARE														
Wilmington														
Wilmington General	I S Skura	165	8 895	214	45	2 663	6	6	0	0	= 12	260 295	FM	2
DISTRICT OF COLUMBIA														
Washington														
Eastern Dispensary and Casualty														2
FLORIDA														
Daytona Beach														
Halifax District	H A King	227	11 113	410	35	15 482	2	0	0	0	= 2	300 300	FM	2
Jacksonville														
Baptist Memorial	A M Manson	240	13 075	199	19	4 691	2	4	0	0	= 6	325-375	O	2
St Luke's	E E Leitner						2	0	0	0	= 2	375 350	PM	2
St Vincent's	J M Wachtel	282	16 607#	297	44		2	1	0	0	= 3	375 350	PM	2
Pensacola														
Baptist	J R Lundquist	182	13 903	170	49		6	4	0	0	= 10	225-300	FM	2
Sacred Heart	R F Dalrymple						3	0	0	0	= 3	225 275	FM	2
St Petersburg														
Mound Park	F B Campbell Sr	131	4 394	658	22		2	2	0	0	= 4	307 307	PM	2
GEORGIA														
Columbus														
Medical Center	F B Horn	233	13 345	413	34	27 958	2	2	0	0	= 4	350 400	FM	2
Fort Oglethorpe														
John T Hutcheson Memorial Tri County	F H Simonton	95	6 267	156	41	6 007	3	3	0	0	= 6	450-475	PM	2
Macon														
Macon	W R Birdsong	312	23 691	500	25	61 285	4	2	0	0	= 6	275-325	FP	2
ILLINOIS														
Berwyn														
MacNeal Memorial	A Bolino	39	1 941	293	33		8	0	0	0	= 8	350 375	FP	2
Chicago														
Grant	S A Diamond						1	1	0	0	= 2	225-250		2
Illinois Masonic	J S Poticha	75	2 861	141	38	3 516	1	0	0	0	= 1	175 275	FM	2
Louis A Weiss Memorial	H F Bessinger	203	7 451	212	43	1 570	11	11	0	0	= 22	385 410	FP	2
St Mary of Nazareth	S A Motto	231	11 036	447	37		2	0	0	0	= 2	225-250	FP	2
Decatur														
Decatur and Macon County														1
INDIANA														
Indianapolis														
Methodist	D R Hampshire		11 398				1	1	0	0	= 2	290 320	PM	2
IOWA														
Des Moines														
Broadlawns Polk County	C A Kern	137	1 850	246	38	8 873	2	0	0	0	= 2	225-225	FM	2
KANSAS														
Wichita														
St Francis	V D Schwartz	365	21 421	313	36	28 657	2	2	0	0	= 4	275 300	FP	2
Wesley	J Piller	381	19 571	309	42		2	2	0	0	= 4	295 375	FM	2
KENTUCKY														
Covington														
Wm Booth Memorial	P W Simpson	197	5 834	235	28	6 639	3	3	0	0	= 6	300 300	FM	2
Lexington														
Central Baptist	D M Royalty	128	7 546	130	25	5 958	3	3	0	0	= 6	350-400	FP	2
LOUISIANA														
Lafayette														
Lafayette Charity	E Hull					25 572	20	0	0	0	= 20	375 375	PM	1
Monroe														
E A Conway Memorial	H E Jones	170	8 667	507	57	51 482	10	0	0	0	= 10	400 450	PM	2
New Orleans														
Touro Infirmary	L Kuhn						1	0	0	0	= 1	125 175	FP	2
Pineville														
Huey P Long Charity	M Honigman	142	9 730	340	35	73 186	12	0	0	0	= 12	375 375	PM	1
MAINE														
Portland														
Maine Medical Center	S R Branson					180	1	1	0	0	= 2	175-200	FP	2
MARYLAND														
Baltimore														
University	T Woodward		Inc in Int Med				2	1	0	0	= 3	200 250	PM	2
Bethesda														
Suburban	W T Joyce	190	9 691	282	49	3 503	3	3	1	0	= 7	175-250	FM	2
MASSACHUSETTS														
Boston														
New England	R A Draper	29	945	33	57	1 297	2	2	0	0	= 4	225 275	FM	2
Fall River														
St Anne's	J C Corrigan	339	6 685	175	38	14 475	4	1	0	0	= 5	250 250	FM	2
Worcester														
Worcester City	J A Lundy	152	6 708	443	44	21 417	2	2	0	0	= 4	250 333	PM	2

Numerical and other references are listed on pages 811 through 814

8 GENERAL PRACTICE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Main Maintenance FM FM PM O	Length of Approved Program (Years)
MICHIGAN														
Benton Harbor														
Mercy	S Gould	125	7 353	173	41	6,121	1	1	0	0	= 2	325-325	FM	2
Dearborn														
Oakwood	S M Gillespie	82	5,808	108	57		4	4	0	0	= 8	250 325	FM	2
Detroit														
Evangelical Deaconess	W P Curtiss		2,674	203	55		2	2	0	0	= 4	317 317	PM	2
Henry Ford	J G Mateer						1	1	0	0	= 2	300-320	PM	2
Flint														
Hurley	J S Schultz	187					2	2	0	0	= 4	325-350	FM	1
McLaren General	G C Cutler	278	13 062	229	52		3	3	0	0	= 6	375 400	PM	2
Grosse Pointe														
Cottage														2
River Rouge														
Sidney A Sumby Memorial	A W Mitchell						2	2	0	0	= 4	350	FM	2
Saginaw														
St Mary's	T E Fleschner	164	8 575	201	42	105	1	1	0	0	= 2	400 400	PM	2
Wyandotte														
Wyandotte General	K T Ray	188	12,562	244	34	18,688	6	2	0	0	= 8	650		2
MINNESOTA														
St Paul														
Midway	A F Ritt	108	7 262	118	52	5 866	4	4	0	0	= 8	300 350	FM	2
St Luke's	R I Lindell	196	7,853	166	43	5,367	4	4	0	0	= 8	300 350	FP	2
MISSISSIPPI														
Jackson														
Mississippi Baptist	C D Brannan	183	11 269	130	53	12,451	1	1	0	0	= 2	250 250	PM	2
University	T Brooks					338	2	2	0	0	= 4	250 250	O	2
MISSOURI														
Columbia														
University of Missouri Medical Center	V F Wilson		Inc in Int Med				2	2	0	0	= 4	200 300		2
Kansas City														
Menorah Medical Center	E L Petry						1	1	0	0	= 2	300-350	FP	2
Trinity Lutheran	O W Theel	7	2 729	97	59	5,141	2	2	0	0	= 4	300 300	PM	2
St Joseph														
Missouri Methodist	D J Stallard		4,324	254	22		2	0	0	0	= 2	225 225	FM	1
St Louis														
De Paul	C E Martin						1	1	0	0	= 2	200 225	FM	2
Lutheran	F W Klinge	241	10 906	393	40	8 563	3	3	0	0	= 6	200 225	FP	2
St Anthony's	G O Sullivan	225	3,920	71	25	12 400	2	2	0	0	= 4†	250 300	FM	2
NEW JERSEY														
Flemington														
Hunterdon Medical Center	R R Henderson	101	5,040	197	58		4	0	0	0	= 4	150 200		2
Montclair														
Mountainside	H F Schurman	295	12,223	405	46	13 315	2	2	0	0	= 4	250 300	FP	2
Morristown														
Morristown Memorial	R Earp	75	12,013	257	68	6,672	2	2	0	0	= 4	225 275	PM	2
Princeton														
Princeton	B Scasserra	131	6,704			2,332	3*	3	0	0	= 6	300 300	FM	2
Somerville														
Somerset	M E Tolomeo	203	11,379	294	463	3 544	1	0	0	0	= 1	275 275	FM	2
Summit														
Overlook	D F Kent	218	10 858	319	50	1,299	2	2	0	0	= 4	200 250	FM	2
NEW MEXICO														
Los Alamos														
Los Alamos Medical Center		36	2 512	26	92		1	1	0	0	= 2	600 600		2
NEW YORK														
Buffalo														
Mercy	C Banas	328	13 083	411	49	2,993	3	0	0	0	= 3	225-250	FP	1
Millard Fillmore	M Cheplove						1	1	0	0	= 2	298 323	PM	2
Glen Cove														
Community	F Bilello	161	11,493	247	47	30 961	1	1	0	0	= 2	300 300	FM	2
Rochester														
St Mary's	C DeSando	129	6 076	157	34	6 430	1	1	0	0	= 2	200 225	FM	2
Yonkers														
Yonkers General	M T Eisen						2	1	0	0	= 3	175-175	O	2
NORTH CAROLINA														
Chapel Hill														
North Carolina Memorial	C H Burnett													
OHIO														
Akron														
Akron City	D J Roberts	134	4,296			10,159	2	2	0	0	= 4	275 300	FP	2
Akron General	G K Parke						4	2	1	0	= 7	300 350	FM	3
St Thomas	R A Breckenridge						2	2	0	0	= 4	250 300	FP	2
Barberton														
Barberton Citizens	A Brown	208	12 091	247	45	1 482	3	3	0	0	= 6	375 425	FM	2
Cincinnati														
Christ	J Lindner		5 276				4	4	0	0	= 8	200 225	FM	2
Good Samaritan	J C Willke	270	14,300	480	40	2 900	2	2	0	0	= 4	250 275	FM	2
Cleveland														
Fairview Park	R S Maurer	73	2 947#	165	46	2 188	2	2	0	0	= 4	250 300	FP	2
Polyclinic	R V Bachman	130	6 443	156	40	6 488	4	3	0	0	= 7	300 350	FM	3
Woman's	P Coppedge	117	5,408	140	30	3,359	4	4	0	0	= 8	250 300	FM	2

Numerical and other references are listed on pages 811 through 814

8 GENERAL PRACTICE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths Number	Deaths Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month Min Max	Main Affiliation FM PM O	Length of Approved Program (Years)
OHIO—Continued														
Cleveland Heights														
Doctors	H W Salter						2	2	0	0	= 4	200-325	FP	2
Columbus														
Mount Carmel	J J Henry	362	15,117	367	49	9,885	2	1	0	0	= 3	275-300	FP	2
St Anthony	R F Goldberg	160	2,220	159	25	805	4	4	0	0	= 8	265-300	FM	2
White Cross	R S Young	96	Total 1,[illegible]	17	53		1	0	0	0	= 1	290-315	PM	2
Dayton														
Good Samaritan	P Troup	393	18,162	455	47		1	2	0	0	= 3	250-275	FM	2
Elyria														
Elyria Memorial	B V Myers	85	3,007	136	27		3	2	0	0	= 5		FM	2
Euclid														
Euclid Glenville														2
Lima														
Lima Memorial	J Rodziewicz						4	4	0	0	= 8	300-325	FM	2
St Rita's	F Murray	147	7,086	172	35	3,758	1	0	0	0	= 1	400-450	PM	2
Ravenna														
Robinson Memorial Portage County	R Glasgow	114	8,862	254	35	6,987	5	5	0	0	= 10	250-350	FM	2
Steubenville														
Ohio Valley	J Y Bevan	193	10,095	457	52	12,265	1	1	0	0	= 2	300-325	FM	2
Toledo														
St Charles	F C Clifford	230	9,162	221	43	1,920	1	1	0	0	= 5	350-	FM	2
St Vincent's	M V Schnitker						1	1	0	0	= 2	275-325	FP	2
Warren														
St Joseph's Riverside	F A Forni		6,810	162	33	5,828	4	3	0	0	= 7	300-300		2
Youngstown														
St Elizabeth	H F Chalker	73	2,180	181	36		1	1	0	0	= 2	300-325	FM	2
Youngstown	J J Elber						2	2	0	0	= 4	275-350	FM	2
OKLAHOMA														
Oklahoma City														
University of Oklahoma Medical Center University Hospitals [31]	I Brown						4	4	0	0	= 8	275-300	PM	2
OREGON														
Portland														
St Vincent	R H Finker	259	13,[illegible]	389	[illegible]	1,748	2	2	0	0	= 4	275-285	PM	2
PENNSYLVANIA														
Altoona														
Altoona	J M Ronan Jr	130	3,230	26	33	4,150	3	3	0	0	= 6	325-350	FM	2
Bristol														
Lower Bucks County	S Vine	181	11,210	163	54	29,974	3	0	0	0	= 3	300-300	PM	2
Chester														
Chester	H Gold	211	10,155	327	55	4,003	4	0	0	0	= 4	350-350	FM	2
Coaldale														
Coaldale State														2
Danville														
George F Geisinger Memorial	F A Collins						1	0	0	0	= 1	175-225	FM	2
Erie														
St Vincent	J D Weaver						1	1	0	0	= 2	275-325	FM	2
Lancaster														
Lancaster General	R H Manu	68	1,885	1	39	6,578	2	2	0	0	= 4	400-400	FM	2
St Joseph	C Stapinski	306	8,[illegible]8	5	46	13,069		3	0	0	= 6	300-300	FP	2
Norristown														
Montgomery	S C Carfagno	139	8,943	1	42	13,907	2	0	0	0	= 2	350-450	FM	2
Sacred Heart	M A Berone	170	5,311	910	36	6,655	4	0	0	0	= 4	350-450	FM	1
Philadelphia														
St Mary's Franciscan	J A Daly	18	6,117	163	61	11,851	3	3	0	0	= 6	250-250	FM	2
Pittsburgh														
St Clair Memorial														2
St Johns General	A C Vellenik	117	7,979	97	50	3,066	5	0	0	0	= 5	300-300	FM	2
Pottsville														
A C Milliken	N M Wall		7,850	63	33	14,661	1	0	0	0	= 1	350-400	FM	2
Reading														
Community General	C S Krin	117	6,660	214	40	21,018	1	3	0	0	= 4	300-375	FP	2
Sharon														
Sharon General	F C Falk	227	13,170	304	31	15,368	4	4	0	0	= 8	200-200	FM	2
PUERTO RICO														
Arecibo														
Arecibo District	R Ramirez	291	8,465	365	64	27,874	4	4	0	0	= 8	350-400	FM	2
Hato Rey														
Hospital Auxilio Mutuo	C A Romero	72	3,640	65	37	21,192	2	2	0	0	= 4	250-350	FM	2
RHODE ISLAND														
Newport														
Newport	A M Tartaglino						2	0	0	0	= 2	150-200	FM	2
Pawtucket														
Memorial	F T Mara		Inc in Int Med				2	2	0	0	= 4	250-250	FM	2
Woonsocket														
Woonsocket	A Burgess	166	8,453	249	21	3,496	3	3	0	0	= 6	346-346	PM	2
SOUTH CAROLINA														
Greenville														
Greenville General	J Webb	156	7,319=	294	35	11,574	2	1	0	0	= 3	275-300	O	2
SOUTH DAKOTA														
Sioux Falls														
Mckennan														2
Sioux Valley	R Nelson	160	9,623	268	40	8,807	1	1	0	0	= 2	150-150	FM	2
Yankton														
Sacred Heart														2

Numerical and other references are listed on pages 811 through 814

8 GENERAL PRACTICE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O	Length of Approved Program (Years)
TENNESSEE														
Knoxville														
St Mary's Memorial	J L Raulston	28[illegible]	13 494	297	37	1,219	1	1	0	0	= 2	250-275	FP	2
University of Tennessee Memorial Research Center and Hospital	I Burkhart					26,130	1	1	0	0	= 2	320 340	FM	2
TEXAS														
Galveston														
St Mary's Infirmary	M L Ross	169	7 123	53	3[illegible]	4,216	2	2	0	0	= 4	275 275	PM	2
Houston														
Memorial	R Lilles	353	20 424	317	3[illegible]		4	4	0	0	= 8	220 245	PM	2
Midland														
Midland Memorial														2
San Antonio														
Baptist Memorial	W Johnson	131	7 145	343	44		1	1	0	0	= 2	150 250	FP	2
Santa Rosa	F I Mueller Sr	351	22 815	560	53	32 046	1	1	0	0	= 2	275 300	FP	2
UTAH														
Ogden														
St Benedict's	W P Daines	105	9 040	132	54	14 574	4	0	0	0	= 4	275 275	PM	1
Thomas D Dee Memorial	G F Kearns	152	10 719			657	0	3	0	0	= 3	325 350	PM	2
Salt Lake City														
Dr W H Groves-Latter Day Saints	F I Capener	348	21,[illegible]04	491	44	16 229	1	1	0	0	= 2	250 275	FP	2
VIRGINIA														
Newport News														
Riverside	H I Kraus	Inc in Int Med					1	1	0	0	= 2	250 300	FM	2
Norfolk														
De Paul	H Boone	241	16,211	350	53	19 578	1	1	0	0	= 2	225 250	FM	2
Norfolk Community	G H Francis	85	4 220	142	30	3 527	2	2	0	0	= 4	250 300	FM	2
Norfolk General	G H Rector	72	2,[illegible]85	269	275	13 116	2	2	0	0	= 4	215 265	FM	2
Portsmouth														
Portsmouth General	W A Brown Jr	165	8 578	304	30	8 744	2	4	0	0	= 6	300 325	FM	2
Richmond														
Retreat for the Sick	O P Graham Jr	67	3,[illegible]90	[illegible]	27	307	2	1	0	0	= 3	250 300	FP	2
Suffolk														
Louise Obici Memorial	F C Joyner	31	1 445#	138	24	5 337	0	4	0	0	= 4	250 300	FM	2
WASHINGTON														
Seattle														
Providence	P O Hollaren	258	10 139#	344	[illegible]	2 510	1	0	0	0	= 1	250 350	FP	2
Spokane														
Sacred Heart	S F Shikany	350	22 834	523	41		2	0	0	0	= 2	250-250	FP	2
St Luke's	R A Lynberg	53	2 255	115	34		1	0	0	0	= 1	225-225	FM	2
WEST VIRGINIA														
Bluefield														
Bluefield Sanitarium	W St Clair J R Shanklin	180	3 402	188	16		4	0	0	0	= 4	400	FM	2
Charleston														
Charleston General	W A Thornhill Jr	Inc in Int Med					2	0	0	0	= 2	225 275	FP	2
Huntington														
Cabell Huntington	W Bray	70	3 958	67	31		5	2	0	0	= 7	250 275	FM	2
Parkersburg														
St Joseph's	J H Gile	189	9 375	249	25	11,511	1	0	0	0	= 1	300 300	FM	2
Wheeling														
Ohio Valley General	W Perilman	236	3 420	84	32		3	2	0	0	= 5	300 375	PM	2
WISCONSIN														
Madison														
Methodist	G I Derus	85	4 500	92	50		1	1	0	0	= 2	250 300	FM	2
St Mary's														2
Milwaukee														
Evangelical Deaconess	D C Ausman	80	3 437	205	35	1 570	2	2	2	0	= 6	250 300	FP	2
Milwaukee County	W A McClellan		2 822	169	37		2	2	0	0	= 4	229 282		2
Milwaukee	O Royce	221	10 170	251	42	1 125	1	1	0	0	= 2	281 331	PM	1
St Luke's	M Landsberg	224	10 200	194	39	11 494	1	1	0	0	= 2	275 325	FM	2
St Michael	A Verdone						4	4	0	0	= 8	275 300	FM	2

9 INTERNAL MEDICINE

Residency programs in the following hospitals have been approved by the Council, the American Board of Internal Medicine, and the American College of Physicians through the Residency Review Committee for Internal Medicine, as offering acceptable training in the specialty under any of the several programs leading to eligibility for examination by the American Board of Internal Medicine

Hospitals, 612, Residencies, 5,770

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O	Length of Approved Program (Years)
UNITED STATES AIR FORCE														
TEXAS														
U S Air Force San Antonio	M J Nateff	419	8 458#	77	82	9,398	7	7	7	0	= 21			3
UNITED STATES ARMY														
CALIFORNIA														
Letterman General, San Francisco	F J Hughes Jr	304	3 802	95	91	43 154	4	4	4	0	= 12		FM	3
COLORADO														
Fitzsimons General Denver	B E Pollock	57	999	16	100	2 362	3	3	3	0	= 9			3

Numerical and other references are listed on pages 811 through 814

9 INTERNAL MEDICINE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	FM Main Internship PM O	Length of Approved Program (Years)
DISTRICT OF COLUMBIA														
Walter Reed General Washington	D O Lynn	290	1 645	100	76	45 186	6	6	6	0	= 18			3
HAWAII														
Tripler Army Honolulu	A A Biederman	230	5 077	85	67	27 570	4	4	4	0	= 12			3
TEXAS														
William Beaumont General El Paso	R C Hunter	130	3 863	61	89	17 521	2	2	2	0	= 6			3
Brooke General San Antonio	R F Blount	147	5 930	122	80	[illegible]	6	6	6	0	= 18			3
WASHINGTON														
Madigan General Tacoma	W C Berry	171	3 102	29	86	21 015	2	2	2	0	= 6			3
UNITED STATES NAVY														
CALIFORNIA														
U S Naval Oakland	C M Davis	707	3 102	73	90	82 820	2	2	4	0	= 8			3
U S Naval San Diego	J F Corman	590	6 148	283	88	24 301	3	3	4	0	= 10			3
ILLINOIS														
U S Naval Great Lakes	I I Moore	372	4 622	76	92	16 490	1	1	1	0	= 3			3
MARYLAND														
U S Naval Bethesda	H O Canada	205	3 027	100	88	27 101	2	2	2	0	= 6			3
MASSACHUSETTS														
U S Naval Chelsea	H I Stone Jr	145	2 205	33	77	14 478	1	2	2	0	= 5			3
NEW YORK														
U S Naval New York City (St Albans)	R Volk	197	2 994	75	67	13 349	1	3	4	0	= 8			3
PENNSYLVANIA														
U S Naval Philadelphia	J W Cowan	800	3 593	147	82	28 000	2	2	2	0	= 6			3
VIRGINIA														
U S Naval Portsmouth	R J Whipple	192	4 121	47	79	30 460	3	2	1	0	= 6			3
UNITED STATES PUBLIC HEALTH SERVICE														
CALIFORNIA														
U S Public Health Service San Francisco	R H Linn	152	1 612	57	78	6 739	1	1	1	0	= 3			3
LOUISIANA														
U S Public Health Service New Orleans	J K Irion	189	2 619	67	86	10 7 6	2	2	1	0	= 5			3
MARYLAND														
U S Public Health Service Baltimore	C F Ellinger	78	1 855	33	70	4 484	2	2	2	0	= 6			3
National Institutes of Health Clinical Center Bethesda	J Berry	9	1 014	69	81	2 410	0	0	6	0	= 6			1
MASSACHUSETTS														
U S Public Health Service Boston	D J Lenenberg	61	1 428	32	77	6 427	1	1	1	0	= 3			3
NEW YORK														
U S Public Health Service New York City (Stapleton)	C C Spicknall	170	3 035	89	82	16 464		3	3	0	= 9			3
WASHINGTON														
U S Public Health Service Seattle	W H Stimson	8	1 246	40	82	4 4 0	1	1	1	0	= 3			3
DEPARTMENT OF HEALTH EDUCATION AND WELFARE														
DISTRICT OF COLUMBIA														
Freedmen's Washington	J B Johnson	65	1 254	214	38	15 704	1	6	4	2	= 13	308-417	PM	3
NONFEDERAL AND VETERANS ADMINISTRATION														
ALABAMA														
Birmingham														
University of Alabama Medical Center University Hospital and Hillman Clinic	W B Frommeyer Jr	260	4 850	478	52	26 849	14	8	4	2	= 28	143 250	FM	3
Veterans Administration	F F Feldleman Jr	173	1 938	186	60	1 524	6	4	2	0	= 12	241 347	O	
Fairfield														
Lloyd Noland	C J Porter	73	2 925	146	42	39 377	–	2	2	0	= 6	250 375	FM	3
Mobile														
Mobile General	W Atkinson		2 590	278	64	3 490	–	1	0	0	= 3	200 450	PM	1
Tuskegee														
Veterans Administration	F J Odom	347	1 512	101	9	664	4	2	2	0	= 8	271 347	O	3
ARIZONA														
Phoenix														
Maricopa County General	M H Green	121	2 060	450	42	6 147	2	2	2	0	= 6	373-412		3
St Joseph	H Caldwell	61	2 061	108	84	3 390	1	1	1	0	= 3	250 350	FP	3
Tucson														
St Mary's Pima County General	R J Dexter B F Weeks	124	447	329	45	10 036	2	0	0	0	= 2	200 250	FM	1
Tucson Medical Center	S Sanger	57	6 149	129	50	2,359	3	0	0	0	= 3	200 200	FM	1
ARKANSAS														
Little Rock														
University of Arkansas Medical Center	R V Ebert	53	1 431	163	96	15 625	4	4	4	0	= 12	170 237	O	
Veterans Administration	H R Hipp	188	2 836	151	79	916	8	4	4	0	= 16	241 347	O	3
CALIFORNIA														
Arlington														
General Hospital of Riverside County	C J Anduv	12	1 697	312	5	4 079	4*	0	0	0	= 4	444-444	IM	1
Bakersfield														
Kern County General	H E Einstein	73	2 466	295	59	34 839	4	3	1	0	= 8	54 425	O	3
Berkeley														
Herrick Memorial	H Mankin	40	2 178	132	58	4 920	1	1	1	0	= 3	300-400	FP	3
Duarte														
City of Hope Medical Center	F Beutler	22	231	87	89	4 047	0	0	1	1	= 2	400-400	O	1

Numerical and other references are listed on pages 811 through 814

9 INTERNAL MEDICINE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O	Length of Approved Program (Years)
CALIFORNIA—Continued														
Fresno														
General Hospital of Fresno County	J Radding	401	3 670	504	38	20,341	2	2	2	0	= 6	300 350	PM	3
Glendale														
Glendale Sanitarium and Hospital	D L John	123	5,646	270	48	7,443	1	1	1	1	= 4	325 350	PM	3
La Jolla														
Scripps Clinic and Research Foundation	E L Keeney	36	2 120	34	91	8,050	2	2	1	1	= 6†	415 415	PM	2
Long Beach														
Memorial Hospital of Long Beach	J R Knutson	85	3,666	238	28	624	1	1	1	0	= 3	325-425	PM	3
Veterans Administration [80]	D W Jelk	390	3,060	471	80	12,479	6	6	6	0	= 18	271 462	O	3
Los Angeles														
Cedars of Lebanon	J Reynolds, I Gunther	120	5 380	396	40	25,922	4	3	3	0	= 10†	265-370	FM	3
Hollywood Presbyterian-Olmsted Memorial	G K Wharton	68	2 892	252	32	5,429	1	0	0	0	= 1	279-329	PM	1
Hospital of the Good Samaritan	J L Reynolds	83	3,254	227	36	9,242	2	2	2	0	= 6	325 375	FM	3
Los Angeles County	T H Brem V I Johns	804	31 538	3,301	44	168,852	18	18	17	0	= 53	273 303	PM	3
Queen of Angels	E C Lemallen	60	2,517	197	52	2,125	1	1	1	0	= 3	275 325	FM	3
St Vincent's	F W Boland	83	2 694#	165	26		1	0	0	0	= 1	350 350	FM	1
University of California	J S Lawrence	88	2,532	166	83	12 084	6	5	1	0	= 12	240 314	FPO	3
Veterans Administration	I Fred	732	4,511	437	77	3,301	16	22	14	2	= 54	271 412	PM	3
White Memorial [82]	V I Johns	40	1,690	144	61	28,001	2	3	2	0	= 7	215-235	PM	3
Oakland														
Highland Alameda County	K W Benson	95	4 890	499	49	33,980	4	3	3	0	= 10	200 295	FM	3
Kaiser Foundation	R Goldberg	67	1,951	193	67		5	3	1	0	= 9	315 365	FM	3
Veterans Administration	F R Moritt	231	3,484	253		672	3	3	3	0	= 9	271 462		3
Orange														
Orange County General	R W Opfell, G F Warner	216		425	54	22,719	2	2	2	0	= 6	355 395	O	3
Palo Alto														
Stanford Medical Center and Affiliated Hospitals	H Holman						12	12	3	1	= 28			3
Palo Alto Stanford Hospital Center		10	356	15	86	3,797						250 325	O	
Veterans Administration														
Pasadena														
Collis P and Howard Huntington Memorial	F R Evans	72	2 788	251	47	1 648	1	1	1	0	= 3			3
San Bernardino														
San Bernardino County Charity	W L Cover	93	2,398	388	50	33,406	4	0	0	0	=4	300	FM	1
San Diego														
Mercy	W C Hall	88	3 759	246	57	5,370	1	1	1	0	= 3	225 325	FP	3
San Diego County General	A L Edgar	83	1,622	412	44	5 102	4	2	2	0	= 8	250 350	FM	3
San Francisco														
Children's	P M Aggeler		1 620	74	45	5 775	2	2	0	0	= 4	250 300	FP	3
Franklin	D Gorman	56	2 268	127	37	7,699	2	1	0	0	= 3	400 700	FM	1
French	D Wilbur	60	3,155	159	33	12 831	3	0	1	0	= 4	250 300	FM	2
Kaiser Foundation	C C Herbert	46	1,967	175	55	217 250	2	3	3	0	= 8	315 415	FP	3
Mary's Help	F Rochex	35	1 490#	128	40	4,154	2	0	0	0	= 2	225 325		1
Mount Zion	H H Rosenblum		2 384#	119	66	9 848	5	5	2	0	= 12	150 350	FM	3
Presbyterian Medical Center	G B Robson	52	2,305	142	62	28 999	3	3	1	0	= 7	100 175	PM	3
St Luke's	E L Bruck	78	3 079	189	49	8,299	3	2	1	0	= 6	325 375	FP	3
St Mary's	J J McGinnis	76	2 553	180	71	9,064	3	3	2	0	= 8	200 500	FP	3
San Francisco General	N J Sweet	244	5,121	1,000	42	3,051	10	2	2	0	= 14	220 360	O	3
University of California Service	R E Allen	204	7,048	231	71	41 359	2	2	2	0	= 6	200 325	FM	3
Southern Pacific General	H Brainerd	90	3 340	171	78	40 374	10	6	4	2	= 22	243 426		3
University of California Hospitals	F M Willett	156	1,505	182	72	866	12	7	2	0	= 21	271 462	O	2
Veterans Administration		111	1,491	383	61	10 655	4	2	1	0	= 7	270 320	PM	3
San Jose														
Santa Clara County	J E Glansiracusa	66	1,476	267	58	11 691	0	1	0	0	= 1	300 400	FM	2
San Mateo														
Community Hospital of San Mateo County	W F Knorp	60	2 824	133	50		3*	2	1	0	= 6	200 250	FP	3
Santa Barbara														
Santa Barbara Cottage [86]	K J McNiece	74	836	69	87									1
Sepulveda														
Veterans Administration	R Brawley	77	2 067	451	50	10 035	3	2	1	0	= 6	275 340	PM	3
Stockton														
San Joaquin General	L Armanino	136	4 277#	732	46	15,624	7	6	6	0	= 19	273 303	FM	3
Torrance														
Harbor General	F K Bauer	100	2 523	64	79	11 293	2	2	1	0	= 5	458 593	O	3
CANAL ZONE														
Balboa Heights														
Gorgas	F P Smith	81	3 587	169	50	7,023	2	0	0	0	= 2	300 300	PM	2
COLORADO														
Denver														
Mercy	G Maresh	54	1 961	158	65	4,828	2	1	1	0	= 4	275 300	PM	3
Presbyterian	H A Bradford	71	3 254	153	94		3	2	1	0	= 6	200 250	FM	3
St Joseph's	F B McGlone	93	3,431	167	63	3,725	1	1	0	0	= 2	225 250	PM	2
St Luke's	M G Nims	49	1,367	174	79	25,753	6	6	6	4	= 22†	180 205	O	3
University of Colorado Medical Center	G Meiklejohn	91	2 969#	503	63	14,952						179 205		
Colorado General	G Meiklejohn	181	2 364	170	86	958	10	7	5	0	= 22	271 347	O	3
Denver General	T P Sears	310	1 024	327	61	6 677	8	4	1	0	= 13	275-325	FM	2
Veterans Administration [112]	G R Curless	103	4,087	240	33	313	3	2	1	0	= 6	285 360	PM	1
Pueblo														
Colorado State [115]	J S Clutter	106	4,078	369	38	1,993	3	3	0	0	= 6	240-265	FM	2
St Mary-Corwin		75	3 020	275	36	3 068	1	1	1	0	= 3	300-350	PM	3
CONNECTICUT														
Bridgeport														
Bridgeport	J Smith	81	2 910	131	70	2,695	2	1	0	0	= 3	200 350	FM	2
St Vincent's	V Lynch	216	6 485	556	51	3 033	16	8	6	0	= 30	125 257	FP	3
Greenwich														
Greenwich	F C Weber													
Hartford														
Hartford	M O Phelps													

Numerical and other references are listed on pages 811 through 814

9 INTERNAL MEDICINE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main FM PM O	Length of Approved Program (Years)
CONNECTICUT—Continued														
Hartford Municipal Hospital and Health Center	W F Smith	116	2 175	173	45	14 078	1	1	0	0	= 2	280 280	FM	2
St Francis	S Burnes	153	4 807	326	37	9 711	2	2	2	0	= 6	175 200	FP	3
New Britain														
New Britain General	J C White	85	5 021	246	58	45 808	1	1	1	0	= 3	250 325	FM	3
New Haven														3
Yale-New Haven Medical Center														
Grace-New Haven Community	P B Beeson	132	4 367	529	62	20 591	10	8	1	0	= 19	60-200	FM	
Veterans Administration (West Haven)	I Amatruda	67	1 851	145	73	1 019	3	9	1	0	= 13	273 347		
Hospital of St Raphael [1] [2]	J S Evans	60	2 307	314	38	6 722	4	4	1	0	= 9	300-335	PM	3
Newington														
Veterans Administration	P Lipton	182	1 313	103	77	1 098	4	3	1	0	= 8	270-347	O	3
New London														
Lawrence and Memorial Hospital	F Gipstein	61	2 805	199	82	31	3	0	0	0	= 3	250 300	FP	1
Norwalk														
Norwalk	J J Ippolito	52	2 707	237	40	4 231	4	0	0	0	= 4	150-300	FP	1
Waterbury														
St Mary's	W Finkelstein	116	3 629	274	44	9 264	2	2	1	0	= 5	225-275	FP	3
Waterbury	O J Bizzozero	100	3 393	284	45	3 604	2	1	1	0	= 4	225 275	FM	3
DELAWARE														
Wilmington														
Delaware	J B Flinn	83	2 512‡	260	60	1 313	2	2	1	0	= 5	220-260	FP	3
Memorial	J P Lang	81	2 461	249	57	4 250	2	1	1	0	= 4	250-265	FP	3
Wilmington General	C Levy	54	1 992	126	40	2 894	2	0	0	0	= 2	60-295	FM	1
DISTRICT OF COLUMBIA														
Washington														
District of Columbia General	J Nash J Kyle M Romanoff	152	4 641	996	43	41 419	26	5	3	0	= 34	233-283	O	3
Doctor	F A J Geier	57	2 611	167	64		2	1	0	0	= 3	200 250	FP	3
Georgetown University	J H Kyle	83	2 738	235	74	10 934	9	9	0	0	= 18	175-270	FM	3
George Washington University [1]	T M Brown	75	4 450	134	73	15 746	3	2	2	1	= 8	210-285	PM	3
Providence	J E Curtin	62	2 441	195	32	9 089	1	1	1	0	= 3	350-400	PM	3
Veterans Administration	S Katz	101	2 244‡	260	67	3 399	3	10	5	0	= 18	241-347	O	3
Washington Hospital Center	C W Ordman	188	6 068	473	54	20 011	4	4	2	0	= 10	215 245	FP	3
FLORIDA														
Coral Gables														
Veterans Administration	F Wasserman	242	2 765	574	94	1 060	13*	10	8	2	= 34†	2 1 420	O	3
Gainesville														
University of Florida Teaching Hospital and Clinic	S P Martin	0	789	46	89		6	6	4	1	= 17	271 420		3
Jacksonville														
Duval Medical Center	K B Hanson	48	1 470	242	43	23 823	3	2	1	0	= 6	200 250	FM	3
Riverside	D White	25	1 020	36	38	40 000	1	1	0	0	= 2	400-	O	1
St Luke's	J J Borland	43	2 125	130			2	0	0	0	= 2	375 350	PM	1
St Vincent's	J F Geelin	77	3 783‡	167	43	2 083	3	0	0	0	= 3	325-325	PM	1
Miami														
Jackson Memorial [1] [2]	R Jones Jr		4 161	767	49	14 176	18	16	15	1	= 50†	200 325	PM	3
Miami Beach														
Mount Sinai Hospital of Greater Miami	D A Nathan	97	4 013	319	35	7 886	5	3	1	0	= 9	250 300	FM	3
St Francis	D C Stannus	82	3 447‡	235	38	7 923	1	1	0	0	= 2		FM	2
Orlando														
Orange Memorial	W D Steward	61	2 572	240	39		1	1	1	1	= 4	325-400	O	3
Tampa														
Tampa General	F Mauriri		3 125	82	31	4 869	1	1	1	0	= 3	250 300	FM	3
GEORGIA														
Atlanta														
Crawford W Long Memorial	J H Bishop Jr	83	4 036	209	33	4 264	4	2	1	0	= 7	285-300	O	3
Emory University Affiliated Hospital [1]	J W Hurt						12	6	2	0	= 20†			3
Emory University	R B Logue	56	2 949‡	99	68							325 275	PM	
Veterans Administration	J C Crutcher	189	1 894	187	51							271-462	PM	
Georgia Baptist	J B Peacock	95	4 024	191	75	1 683	2	2	1	0	= 5	330 380	PM	3
Grady Memorial	J W Hurst	114	2 546	51	43	4 916	10	8	1	0	= 19	100 200	FM	3
Piedmont	C Smith	51	1 777	64	61	2 604	2	1	1	0	= 4	290-320	PM	3
St Joseph Infirmary	J J Blalock	30	3 137	182	57	4 898	1	1	1	0	= 3	250 275	PM	3
Augusta														
Medical College of Georgia Hospital	J Findley	297	5 324	481		10 114	10	6	5	1	= 22			3
Eugene Talmadge Memorial	J Findley	82	1 509	106	78	1 064						250 300	O	
University	J D Gray	53	2 148	235	98	8,964						200-250	O	
Veterans Administration	J C Boborfonsh	167	1 667	140	61	471						270 347	O	
Savannah														
Memorial Hospital of Chatham County	J Victor Jr	76	4 957	254	54	9 063	1	1	1	0	= 3	350	FM	3
HAWAII														
Honolulu														
Queen's	H Cotshalk	93	4 126	261	55	15 329	2	2	2	1	= 7	225 375	FM	3
St Francis	C M Lum	44	2 267	110	49	5 240	[illegible]	2	1	0	= 5	250-300	FM	3
ILLINOIS														
Chicago														
Augustana	M M Anderson	123	4 598	254	47		3	0	0	0	= 3	200 200	FM	1
Columbus	F F Foley	147	4 768	243	44	26 037	3	3	3	0	= 9	275-325	FM	2
Cook County	F F Foley	663	18 409	3 360	31	77 844	15	18	15	0	= 48	140 140	FM	3
Grant	A Vander Kloot	56	2 808	220	37	2,516	1	1	0	0	= 2	225-250		2
Illinois Central	W T Hand			157	52		2	2	0	0	= 4	300-315	FM	2
Illinois Masonic	J I Braun	67	2 382	256	43	16 810	6	0	0	0	= 6	175-225	FM	3
Mercy	C F O Brien	59	1 017	117	33	31 593	4	3	2	0	= 9	225-300	FM	3
Michael Reese	R Levine	200	5 460	386	75	35 278	6	6	5	0	= 17	125-200	FP	3
Mount Sinai [2]	H Zimmerman	130	2 735	296	48	29 456	4	4	4	1	= 13	225-300	PM	3
Northwestern University Medical Center														
Chicago Wesley Memorial	P S Rhoads	132	4 078	214	58	28 299	4	2	2	0	= 8	250-250	FM	
Passavant Memorial	H L Alt	91	3 440	170	72		2	2	1	0	= 5	225-275	PM	
Veterans Administration Research [1] [2]	C W Borden	193	3,381	199	75		12	8	4	3	= 27	271-462	O	
Evanston (Evanston)	L F Jourdonais	129	4 065	182	71	3 113	3	2	2	0	= 7	225-275	PM	

Numerical and other references are listed on pages 811 through 814

9 INTERNAL MEDICINE—Continued

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ILLINOIS—Continued														
Presbyterian-St Luke's	J Campbell	262	9 323	153	79	12 964	8	8	8	0	= 24	125-175	FM	3
Provident	A Mamby	44	1 061	94	54	821	1	1	0	0	= 2	200 200	FM	1
St Joseph	D L Kessler	59	1 925	137	51	1 818	2	0	0	0	= 2	300 350	FM	1
St Mary of Nazareth	S V Motto	78	2 793	911	37		2	0	0	0	= 2	225 225	FP	1
University of Chicago Clinics	W Adams	208	5 016	228	81	67,073	9	11	7	1	= 28	250 305	O	3
University of Illinois Research and Educational Hospitals	H F Dowling	80	1 425	115	80	21,934	5	4	4	1	= 14	160 215	PM	3
Veterans Admin (West Side) [157]	R J Korn	189	2 185	231	75	4 854	6	8	8	2	= 24	270 347	O	3
Evanston														
Evanston Hospital	See Northwestern University Chicago													
St Francis	J T Paul	85	2 776	302	64	6,197	2	1	1	0	= 4	260 280	FM	3
Hines														
Veterans Administration [162]	A Fittman	215	2 103	272	57	850	10	10	10	2	= 32	271 462	O	3
Peoria														
St Francis	R B Rutherford	178	6,807	280	45	5 644	1	1	1	0	= 3	225 275	FM	3
INDIANA														
Bluffton														
Clinic Hospital	J L Lisaman	56	3 987	77	71	17,854	1	1	1	0	= 3	300 400	PM	3
Indianapolis														3
Indiana University Medical Center														
Indiana University Hospitals	J B Hickam	101	2 321	238	72	3 979	8	8	8	0	= 24	225 275	PM	
Veterans Administration	R H Behnke	202	2,199	233	79	1,522	7	7	0	0	= 14	271 462	O	
Marion County General	P J Fouts	77	1,788	126	40	32,777	4	4	4	0	= 12	269 321	PM	3
Methodist	H D VanVactor	146	3 936	396	38	2,197	4	4	4	0	= 12	290 320	PM	3
St Vincent's	J O Ritchey	62	1 729	141	34	1,254	1	1	1	0	= 3	275 425	PM	3
Lafayette														
St Elizabeth	P W Rothrock	78	2 924#	299	22	264	1	0	0	0	= 1	275 350	FM	1
IOWA														
Des Moines														
Iowa Methodist	D A Glomset	125	3,953	191	57		1	1	1	0	= 3	200 250	FM	3
Veterans Administration	J C Parsons	192	2 066	171	69	1 473	4	4	4	0	= 12	271-412	PM	3
Iowa City														3
State University of Iowa Hospitals														
University	W B Bean	125	3,583	260	72	1 566	8	8	8	0	= 24	200 250	FM	
Veterans Administration	R D Eckhardt	191	2,016	150	74	2,429	6	6	6	0	= 18	270 462	PM	
KANSAS														
Kansas City														
University of Kansas Medical Center	J G Dimond	72	2 625	156	75	21,639	8	8	8	0	= 24	125 175	PM	3
Veterans Admin (Kansas City, Mo)	C J Andrews	169	2 376	199	73		5	5	0	0	= 10	271 271	O	
Wichita														
St Francis	J W Schmaus	128	6 360	231	33		3	0	0	0	= 3	275 275	FP	1
Wesley	F W Crow	182	7,758	249	40		1	0	0	0	= 1	295 375	FM	1
KENTUCKY														
Harlan														
Harlan Memorial	J Willard	61	1,492	75	49	28,000	2	3	3	0	= 8	400 500	PM	3
Lexington														
Good Samaritan	M C Darnell	45	1 973	146	21		1	0	0	0	= 1	220-220	FM	1
St Joseph	C H Fortune	41	1,999	164	27	1 095	2	0	0	0	= 2	220 220	FP	1
Louisville														1
Jewish	B T Towery	72	1 845	402	61	30,874	12	6	4	1	= 23	116 166	FM	3
Louisville General	F A Olash	82	3 950	235	41	2 069	1	1	1	0	= 3	220 245	PM	3
St Joseph Infirmary	J R Gott Jr	159	1,692	221	67	961	2	2	2	0	= 6	270 347	O	3
Veterans Admin														
LOUISIANA														
New Orleans														
Charity Hospital of Louisiana	W R Akenhead	39	1 257	156	57	18,286	3	3	2	0	= 8	125 175	FM	3
Independent Unit	W R Akenhead	95	2 856	454	80	33 359	7	6	4	0	= 17	125 175	FM	3
Louisiana State University Unit	G L Burch	203	3 040	502	69	52 540	6	6	5	0	= 17	125 175	FM	3
Tulane University Unit	W R Arrowsmith	81	3,098	108	75	36,375	3	3	3	0	= 9	225 275	PM	3
Ochsner Foundation	C J Gulotta	144	5 960	302	34		2	2	0	0	= 4	225 275	PM	1
Southern Baptist	A Goldman		3 785	303	47	12 123	2	2	2	0	= 6	125 175	FP	3
Touro Infirmary	H A Buechner	212	2,775	253	82	3 246	8	8	8	0	= 24	270 348	O	3
Veterans Administration		149	5,775	368	30	12,132	3	3	3	0	= 9	125 200	FM	3
Shreveport														
Confederate Memorial Medical Center	M D Hargrove	47	1 818	149	55	539	1	0	0	0	= 1	175 175	FP	1
MAINE														
Lewiston														
Central Maine General	M A Chapin	100	3 634	350	40	4 546	2	2	2	0	= 6	175 225	FP	3
Portland														
Maine Medical Center	R S Hawkes	66	1 738	287	57	11,038	5	5	1	0	= 11	200 250	FP	3
MARYLAND														
Baltimore														
Baltimore City Hospitals	G S Mirick	9	1,596#	102	53	2 675	4*	2	1	0	= 7	200 325	FP	3
Church Home and Hospital	Z R Morgan	51	1 477#	14	57	1 033	2	2	1	0	= 5	225 250	FM	3
Franklin Square	L M Serra		1 010	79	70	3 242	2	1	1	0	= 4†	220-220	FM	3
Hospital for Women [187]	F W Barnes Jr	218	5 399#	583	62	52 086	12	7	3	1	= 23	160-377	PM	3
Johns Hopkins	A M Harvey	56	1 418	136	35	1 971	4	2	1	0	= 7	220 250	FM	3
Lutheran	L A M Krause	71	2 360	253	40	763	4	1	1	0	= 6	225 275	FM	3
Maryland General	F T Cotter	70	1,915	203	44	10 612	2	2	1	0	= 5	275-275	PM	3
Mercy	V M Smith	56	1,710#	171	46	4 027	3*	2	1	0	= 6	275 300	FM	3
St Agnes	L P Gundry	60	1 727	221	56	3 328	2	2	1	0	= 5	225 250	FM	3
St Joseph's	L M Serra	80	1 794	208	48	13 630	6	4	1	0	= 11	130 300	FM	3
Sinai	A I Mendeloff	10	314	15	33	1 256	1	1	1	0	= 3	200-225	FP	1
South Baltimore General	R Parker	96	2 547	336	41	3 186	7	1	1	0	= 9	215 250	FM	3
Union Memorial	J E Howard	150	3 662	353	56	48,056	9	8	6	1	= 24	200 250	PM	3
University	T Woodward	96	3 864	222	56	4,167	2	2	2	0	= 6	200 300	FM	3
Cheverly														
Prince George's General	A Dietz	211	1 826	262	61	457	4	4	4	0	= 12	271 271	O	3
Fort Howard														
Veterans Administration	I Freeman													

Numerical and other references are listed on pages 811 through 814

9 INTERNAL MEDICINE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main tenance FM PM O	Length of Approved Program (Years)
MARYLAND—Continued														
Perry Point														
Veterans Administration [186]	S Coldgraben	61	1 063	31	71	580	1	0	1	0	= 2	280-462	O	3
MASSACHUSETTS														
Beverly														
Beverly	A E Parkhurst	65	2 325	130	58	3 112	1	0	0	0	= 1	250-250	FM	1
Boston														
Beth Israel	H I Blumgart	190	3 678			25 597	6	4	4	0	= 14	167 250	O	3
Boston City														3
I and III Medical Service (Tufts)	F Bikuria	102	3 214	476	62	14 314	8	6	5	0	= 19	158-208	FM	
II and IV Medical Service (Harvard)	W B Castle	95	3 339	429	65	16 180	13	4	0	0	= 17	158-208	FM	
V and VI Medical Service (Boston Univ)	K H Katz	130	3 097	415	47	14 334	10	6	1	0	= 17	158 208	FM	
Carney	F L Colpoys	103	3 770	206	53	6 032	5	3	1	0	= 9	175-225	FP	3
Faulkner	J R Graham	32	1 234	120	40	457	1	0	0	0	= 1	200 225	FM	1
Lahey Clinic	L M Hurvathal F N Allan	61	1 749	113	50	44 955	10	10	10	0	= 30	200 250	O	3
Lemuel Shattuck	T C Chalmers	158	1 133	218	73	3 668	8	4	2	0	= 14	262 262	PM	3
Long Island	J W Cain Jr	576	710	85	54	24 000	8	0	0	0	= 8	450-450	FM	1
Massachusetts General	W Bauer					22 618	12	12	3	1	= 28	108 188	FM	3
Massachusetts Memorial	R W Wilkins	46	1 732	113	54	6 870	4	1	0	0	= 5	175 275	O	3
New England Center	S Proger	84	6 275	87	53	10 196	7	4	1	0	= 12	237 304	O	3
New England Deaconess	C C Bailey H F Root	122	5 600	289	60		13	4	0	0	= 17	200 235	PM	2
Peter Bent Brigham	G W Thorn	85	3 219	283	73	14 722	6	7	6	1	= 20	42 167	FM	3
Veterans Admin (West Roxbury)	T A Warthin	90	1 433	80	83	1 894	4	0	2	1	= 7	237 375	O	
St Elizabeth s	J P Rattigan	137	3 754	191	62	3 314	3	2	2	0	= 7	175-225	FM	3
Veterans Administration (Jamaica Plains)	M B Strauss	259	5 869	464	68	6 012	14	9	9	0	= 32			3
Cambridge														
Cambridge City	E E Hinton	41	1 158	201	28	7 581	2	2	0	0	= 4	170 195	FM	2
Mount Auburn	D Harwitz	161	1 799	192	48	1 589	1	1	0	0	= 2	155 190	FM	2
Chelsea														
Lawrence F Quigley Memorial [91]	W R Ohler	75	825	104	40	19 124	1	0	0	0	= 1	61 77		3
Lawrence														
Lawrence General	I H Nicholson	53	2 734	280	50	5 281	1	1	1	0	= 3	250 300	FM	1
New Bedford														
St Luke s	H Cantor	77	2 856	392	29	4 115	1	0	0	0	= 1	200 200	FP	1
Newton Lower Falls														
Newton-Wellesley [113]	A D Baldwin	66	2 283	220	38	932	1	1	1	0	= 3	200 250	FM	3
Springfield														
Springfield	J I Weiman	155	3 037	353	42	7 589	3	3	3	0	= 9	125 225	FP	3
Walpole														
Londville	D Merrill	20	400	75	67	2 500	0	0	1	0	= 1	300 527	O	1
Worcester														
Memorial [9]	R W Robinson	67	2 514	162	51	4 374	3	2	1	0	= 6	200 275	FM	3
St Vincent	F I Brosnan	187	4 118	300	43	1 859	6*	2	1	0	= 9	175 250	FP	3
Worcester City	J Lundy	50	2 719	375	42	11 557	4	3	1	0	= 8	250 333	PM	3
MICHIGAN														
Ann Arbor														
St Joseph Mercy	M Marshall	111	4 694	257	56	429	3	3	3	0	= 9	310 385	FM	3
University [95]	W D Robinson	176	4 886	229	64	53 064	20	18	18	0	= 56	180 250	O	3
Dearborn														
Veterans Administration [15]	M R Weed	547	4 094	304	58	1 154	4*	4	4	0	= 12	270 317	O	3
Detroit														
Alexander Blain	F W Hollinger	28	1 049	21	28	9 073	1	1	1	0	= 3	325 350	FM	2
Detroit Memorial	J I Cahalan	97	3 418	234	52		2	1	1	0	= 4	425 500		3
Evangelical Deaconess	J D Stern	67	1 946			1 346	2	0	0	0	= 2	317 317	PM	1
Grace	D W Myers	132	6 375	440	51	12 261	3	3	3	0	= 9	275 350	FP	3
Harper	R J Schneck	137	3 756#	314	49	13 570	5	4	4	0	= 13	275 325	PM	3
Henry Ford	J C Matter	353	10 512	674	67	219 518	26	23	23	0	= 72	265 305	PM	3
Jennings Memorial	D Donald	43	289	5	40	82	2	0	0	0	= 2	350	O	1
Mount Carmel Mercy	F J Tallant	145	5 172#	359	45	17 017	4	4	4	0	= 12	450-525	PM	3
Providence	J J Bailey	88	2 709	264	48	2 748	1	1	1	0	= 3	410-450	PM	3
Receiving	M Clapper	147	1 776	188	53	48 776	4	1	8	8	= 21	325-400	PM	3
St John	H Klein	78	2 487	182	74		2	1	1	0	= 4	325-400	FM	3
St Joseph Mercy	F Marie	74	1 843	112	44	1 200	1	1	0	0	= 2	410 430	FM	3
Sinai	J F Berk	86	2 952	145	41	10 317	4	4	4	0	= 12	300 350	FM	3
Woman s	B I Johnstone	110	3 526	181	50	1 358	2	2	2	0	= 6	475 575	O	1
Eloise														
Wayne County General	B Burch	200	4 022	693	45	12 157	8	8	1	0	= 17	463-464	FM	3
Flint														
Hurley	D F Dreyer	187	6 316#	337	45	1 329	2	2	2	0	= 6	325 425	FM	3
McLaren General [11]	H V Sparks	166	3 717	144	60	101	1	1	1	0	= 3	375 425	PM	3
Grand Rapids														
Blodgett Memorial	A K Hamp	71	2 422	196	79	485	2	0	0	0	= 2	325 325	FM	3
Butterworth	W Gaysee	88	2 676#	274	69	988	2	2	2	0	= 6	300 350	PM	3
St Mary s	R H Murray	68	2 433	213	35	600	1	0	0	0	= 1	370 350	FP	1
Highland Park														
Highland Park General	I Jaffe	105	3 776#	225	41	4 650	2	1	1	0	= 4	325-375	FM	3
Kalamazoo														
Bronson Methodist	W D Harrelson	73	2 791	186	53	164	1	1	1	0	= 3	300 310	PM	3
Lansing														
Edward W Sparrow	I W Wainright	136		335	30	942	1	0	0	0	= 1	300-400	FM	1
St Lawrence	J F Cordes	87					2	2	2	0	= 6	350-350	FM	1
Pontiac														
Pontiac General	D S Smith	82	3 563	199	43	887	2	2	2	0	= 6	350-450	FP	2
St Joseph Mercy	M Kozonis	65	3 067	89	45	1 476	2	1	1	0	= 4	375-425	PM	3
Royal Oak														
William Beaumont	F C Rupp	99	4 427	214	50	172	2	2	2	0	= 6	300-400	PM	3
Saginaw														
Saginaw General	B M Bullington	46	2 017	121	50	310	1	1	1	0	= 3†	365-415	PM	3
MINNESOTA														
Minneapolis														
Methodist	J C Dahl	51	1 529	80	54	6 124	1	0	0	0	= 1	200-200	FM	1
Minneapolis General	F W Hoffbauer	83	1 932	310	54	23 674	4	3	3	0	= 10	235-235	FM	3
Mount Sinai	H A Kaplan	170	1 740	124	58	559	1	1	1	0	= 3	238-238	FP	1

Numerical and other references are listed on pages 811 through 814

9 INTERNAL MEDICINE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main tenance FM PM O	Length of Approved Program (Years)
MINNESOTA—Continued														
Northwestern	J Myhre	75	2,838	103	68	516	3	0	0	0	= 3	225 225	FP	1
St Barnabas	F E Martin	89	4,794	171	64		2	0	0	0	= 2	200 200	FM	1
University of Minnesota Affiliated Hospitals														
University	C J Watson	107	2 269	336	82	10 720	8	7	3	2	= 20	244 244		3
Veterans Administration	F B Flink	292	2,910	311	81	5,100	15	15	9	3	= 42	271 462	O	
Ancker (St Paul)	D Gillespie	62	1,321	273	60	12 123	2	2	2	0	= 6	235 235	FM	
Rochester														
Mayo Foundation [232]	R D Miller		24,126	383	75		6	6	6	1	= 19†	200 333	PM	3
Saint Paul														
Ancker	See University of Minnesota Affiliated Hospitals Minneapolis													
Charles T Miller	B A Weis	102	3 314#	157	58	22,794	1	1	1	0	= 3	325 375	PM	3
MISSISSIPPI														
Jackson														
University of Mississippi Medical Center														
University	J R Snavely	77	2 817#	180	72	5 998	8	5	5	0	= 18	250 300	O	3
Veterans Administration	J F Busey	269	1,786	141	67		1	1	0	0	= 2	270-462		
MISSOURI														
Clayton														
St Louis County	R O Muether	40	1,670	247	60	17,623	3	3	3	0	= 9	250-350	FM	3
Columbia														
University of Missouri Medical Center	C T Ray	70	1,569	115	76	8 237	6	5	3	0	= 14	200 300		3
Kansas City														
Kansas City General	V B Ballard	94	2 940	567	42	45,074	3	3	3	0	= 9	220 265	PM	3
Menorah Medical Center	H Statland	141	4,516	169	48	23,320	4	3	1	0	= 8	300 400	FP	3
St Joseph's	A I Decker		3 022	114	87	2 067	2	0	0	0	= 2	250 250	FM	1
St Luke's	M Dodge	139	4,103	298	59	3 719	2	1	1	0	= 4	250 325	FP	3
Veterans Administration	See University of Kansas Medical Center, Kansas City, Kansas													
St Louis														
Barnes	C V Moore	181	6,123	343	80	21,055	16	9	0	0	= 25	150 175	FM	3
De Paul	R Potashnick	118	4 157	319	41		3	2	1	0	= 6	200 250	FM	3
Homer G Phillips	F B Williams Jr	113	3,596	477	39	32 880	9	6	4	0	= 19	235 299		3
Jewish	A B Eisenstein	137	4 665#	327	53	7,973	5	4	1	0	= 10	200 300	FM	3
Missouri Baptist	W M Lonergan	92	3 085	207	76	1 662	2	2	1	0	= 5	250-350	FM	3
Missouri Pacific	J B Harrison	133	4 620	166	46	59 496	6	2	1	0	= 9	200-250	FM	3
St Johns	W F Kitner	123	3,261#	295	54	7 968	2	2	2	0	= 6	250 350	FP	3
St Louis City [228]	F Brittingham R Kinsella	147	3 651	559	69	30,764	12	10	4	2	= 28	234 314	PM	3
St Luke's	P O Hagemann	96	3 243#	198	60	8 259	4	1	1	0	= 6	250-350	FM	3
St Mary's Group of Hospitals of St Louis University	R Wenria	191	5,967	392	60	19 214	6	5	4	0	= 15	150 170	FM	3
Veterans Administration							3	2	1	0	= 6	271 462	O	3
St Louis University Service	R F Mack	70	832	108	80									
Washington University Service	R D Lange	72	681	94	71									
NEBRASKA														
Lincoln														
Veterans Administration	J R Gordon	95	2 454	71	71	2 847	1	1	1	0	= 3	271 347	O	3
Omaha														
Creighton Memorial St Joseph	J R Walsh	143	4 487	134	35	2 113	4	4	4	0	= 12	210 260	FP	3
University of Nebraska	R Grissom	26	561	41	88	9 985	2	2	2	0	= 6	225 300	PM	3
Veterans Administration [239]	J M Holthaus	190	1 884	119	61	318	4	4	4	0	= 12	270 347	O	3
NEW HAMPSHIRE														
Hanover														
Dartmouth Medical School Affiliated Hospitals														3
Mary Hitchcock Memorial	J Milne	163	4 367	223	81	35 517	6	6	6	0	= 18	218 273		
Veterans Administration (White River Junction Vt)	J L Grant	163	4 367	223	81	35 517	6	6	6	0	= 18	218 273		
NEW JERSEY														
Atlantic City														
Atlantic City	W B Stewart	98	4,244	377	49	12 650	2	1	1	0	= 4	200 300	FM	3
Camden														
Cooper	F N Murray	294	8 376	397	45	5,363	2	1	1	0	= 4	200-250	FM	3
East Orange														
Veterans Administration	H A Weiner	195	1,753	185	76		6	3	2	0	= 11	270 462	O	3
Hackensack														
Hackensack	L W Black	71	2 304	257	39	4 583	2	1	1	0	= 4	150 200	FM	3
Jersey City														
Jersey City Medical Center	H Jeghers	312	6,260	971	29	15,510	13	13	14	1	= 41	108 200	FM	3
Montclair														
Mountainside	M Block	60	2 551	263	49	6 665	2	2	2	0	= 6	250 300	FP	3
Mt Holly														
Burlington County	I E Vitert	43	1,167	200	43	674	4	0	0	0	= 4	100-300	FM	1
Neptune														
Fitkin Memorial	L F Albright	72	2 280	304	32	2 080	2	0	0	0	= 2	250 250	FM	1
Newark														
Newark Beth Israel	J Kaufman	62	2 454	298	31	9 130	2	1	1	0	= 4	125 175	FM	3
St Michael's	N A Antonius	88	2,694	266	39	10,795	4	2	2	0	= 8	150 215	FM	3
New Brunswick														
Middlesex General	N Reitman, G Pickar	52	2 059	220	40	3,726	2	1	1	0	= 4	225-275	FM	3
St Peter's General	J Sandella	68	1,624	148	33		3	0	0	0	= 3	200 200	FM	1
Orange														
Orange Memorial	N M Smith	23	838	95	52	3,268	1*	1	0	0	= 2	225 250	FM	2
Paramus														
Bergen Pines County	S F Alexander	272	2 072	677	35	3,111	6	4	1	0	= 11	200 300	FM	3
Trenton														
St Francis	J T Dimun	102	3 277	357	39	3,475	2	1	0	0	= 3	210 210	FM	3
NEW MEXICO														
Albuquerque														
Bataan Memorial Methodist	B Gordon	38	1,756	52	52		3	1	1	1	= 6	300 400	FP	3

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9 INTERNAL MEDICINE—Continued

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NEW MEXICO—Continued														
Bernalillo County-Indian	H Woodward	40	1 109	86	48	8 999	1	1	1	0	= 3	300-400	FP	3
Veterans Administration	W S Taylor	157	1 915	72	93	465	4	3	3	0	= 10	271 347	O	3
NEW YORK														
Albany														
Albany [48]	R I Beebe	122	3 879±	341	66	5 048	8*	6	6	2	= 22	195-275	PM	3
Veterans Administration	J H Cullen	332	2 071	303	73	12,816	3	3	5	0	= 11	271 347	O	3
Binghamton														
Binghamton General	F N Haines	103	4 176	317	39	4 821	2	1	1	0	= 4	290-340	PM	3
Buffalo														
Buffalo General	F J Lipschutz	187	4 995±	421	54	16 570	5	5	1	0	= 11	175-200	FP	3
Deaconess	W T Zimdahl	98	2 075	260	40	1 484	1	1	1	0	= 3	300-350	FM	1
Edward J Meyer Memorial	D K Miller	235	3 824	546	44	38 650	7	7	6	1	= 21	292 389	PM	3
Mercy [5]	J J O Brien	91	2 644	289	43	905	3	3	0	0	= 6	225-350	FP	3
Millard Fillmore	J F Painton	131	3 570	442	46		3	3	2	0	= 8	298-323	PM	3
Roswell Park Memorial	J F Holland	34	582	101	100	5 158	0	0	0	0	= 6	334 381	O	1
Sister of Charity	D McCue	126	3 773	312	37	1 936	0	0	4	0	= 4	335-430	FM	3
Veterans Administration [50]	C W Bilcell	450	2 510	218	60	3 489	7	4	3	0	= 14	271 293	O	3
Clifton Springs														
Clifton Springs Sanitarium and Clinic	B A Watson	85	2 285	75	49	8 214	1	1	1	0	= 3	150-250	FM	3
Cooperstown														
Mary Imogene Bassett	F D Thomas	27	1 216	62	67	8 715	2	1	1	0	= 4	200-350	PM	3
Hempstead														
Meadowbrook	A W Freireich	907	4,854	1 136	37	2 636	8	6	6	0	= 20	275-275	FM	3
Ithaca														
Cornell University Infirmary	N S Moore	18	1 487			1 623	4	1	0	0	= 5	208-308	FP	1
Tompkins County Memorial		40	1 700	192	45									
Johnson City														
Charles S Wilson Memorial	N R Occhino	164	4 953	304	24		2	2	0	0	= 4	225-300	PM	2
Manhasset														
North Shore	W J Mersinger	39	1 278±	102	57	1,813	3	1	1	0	= 5	200-250	FP	2
Mount Vernon														
Mount Vernon	H Belsky	70	2 142	214	46	4 311	1	1	0	0	= 2	200 200	FM	2
New Rochelle														
New Rochelle	W C Meredith	137	5 585	330	40	5 645	1	1	1	0	= 3	225-350	FM	3
New York City														
Beekman-Downtown	M McCall	72	2 173	161	38	7 099	7	0	0	0	= 7	200 275	FM	2
Bellevue Hospital Center														
Div I Columbia University [3]	D W Richards	84	1 444	97	47	27 520	7	4	1	0	= 12	145 195		3
Div II Cornell University [21 22]	J P Alms	85	1,823	164	41	28 773	9	0	2	1	= 12	145 195		3
Div III New York University College of Medicine	J Thomas	32	1 833	274	37	15 766	8	8	2	0	= 18	145 195		3
Div IV New York University Post Graduate Medical School [23]	C McEwen	91	1 016	210	38	3 258	13	9	3	1	= 26	145-195		3
Beth El	I Snapper	71	2 241	205	38	11 562	4	3	1	0	= 8	150-200	FM	3
Beth Israel	A M Fishberg	81	2 004	209	36	11 025	4	4	1	0	= 9	175 195	PM	3
Bronx	F F Feinbel	108	2 820	215	31	20,231	4	2	2	0	= 8	145-195	FM	3
Bronx Municipal Hospital Center	I M London	113	3 581	481	47	41 215	12	8	4	0	= 24	215-215	FM	3
Brooklyn [45]	C Anderson	71	2 877	150	37	12 739	4	2	2	0	= 8	175-205	FM	3
City Hospital at Elmhurst	L R Tuchman	177	3 593	831	45	34 403	7	4	4	0	= 1	145 195		3
Columbus	A Siraganian	75	1 750	312	31	5 296	1	1	1	0	= 3	160-250	FM	3
Coney Island	S Epstein	174	2 817	815	31	26 891	6	6	6	0	= 18	145 195	FM	3
Cumberland														3
Flushing Hospital and Dispensary [3]	C Cramer	65	1 701	17	27	4 242	1	1	1	0	= 3	175 225	FM	3
Fordham	M M Levitt	148	3 21	685	22	34 173	6	2	0	0	= 9	145 195		2
Francis Delafield	S F Brailey	37	515	144	40	3 147	4	2	1	0	= 7	145-195		3
French	H F McNeil	47	1 271	107	22	11 918	1	1	1	0	= 3	120 145	FM	3
Goldwater Memorial Columbia University and Research Division	A Kneeland Jr D Seegal	75	272	34	64		5	0	0	0	= 5	145-195		1
Third New York University Medical Research Service	J M Steele	18	45	113	27		5	5	0	0	= 10	145 195		2
Grand Central	H A Solomon	41	1 145±	133	40	1 120	2	1	1	0	= 4	135-165	FM	1
Harlem	S S Tales	300	2 181	667	30	5 652	6	6	5	0	= 20	115-195		3
Hospital for Joint Disease	M I Kramer	47	1 042	65	43	28 405	1	1	0	0	= 2	85 150	FM	2
Jamaica	D Potter						1	0	0	0	= 1	200	FM	1
Jewish Chronic Disease [5]	M C Goldner	650	1 713	425	33	2 163	8	8	4	0	= 20	200 250	FM	3
Jewish Hospital of Brooklyn	I Goldstein		2 731	271	48	15 730	7	4	2	0	= 13	100 125	FM	3
Kings County Hospital Center	P H Fox	113	10 285	2 017	25	62 313	12	12	12	0	= 36	145 195		3
Knickerbocker	M S Bruno	73	1 720	133	74	8 573	2	3	2	0	= 7	150 225	PM	3
Lebanon	H Frosch P Kraimin	85	2 013	244	45	4 710	2	0	0	0	= 2	125-150	FM	1
Lenox Hill	F Lawrence	125	2 577	143	4	21 314	3	2	2	0	= 7	185-200	PM	3
Lincoln	C R Mesieloff	85	2 919	516	32	23 312	6	4	4	0	= 14	145-195	FM	3
Long Island College	J N Eldon	144	3 476	330	27	13 074	2	2	2	0	= 7	164 191	PM	3
Long Island Jewish	F Meltman	75	2,233	164	61	12 580	2	1	1	0	= 4	100 165	FM	3
Lutheran Medical Center	W F Roxer	51	905	109	43	632	2	1	1	0	= 4	135-185	FM	3
Maimonides	D Grob	153	3 816	410	35	7 032	8	4	2	1	= 15	75 150	FM	3
Memorial Center for Cancer and Allied Diseases [1] James Ewing Memorial	R W Rawson	114	1 802	354	58		12	12	3	0	= 27	125 300	FM	3
Methodist	H D Fenton	109	2 253	192	38	5 442	2	2	1	0	= 5	175 250	FP	3
Mi ercordia	J V Rooney	50	1 037	64	4	1 45	3	0	0	0	= 3	150 175	FM	1
Montefiore	I Leiter	67	3 [illegible]	313	42	2 428	24	11	7	0	= 42	207 282	PM	3
Morrisania City	H I Frosch	152	3 [illegible]	630	3	21 350	[illegible]	4	0	0	= 11	145-195		2
Mount Sinai	A B Cutman	285	[illegible]	456	52	2 334	8	8	5	0	= 21	100-100	FM	3
New York	E H Tuckey	178	3 430	32	6	19 100	9	8	8	3	= 28	164 258	PM	3
New York Infirmary	E V Giorgi	32	858	53	40	7,891	2	1	0	0	= 3	150-175	FM	1
New York Medical College—Metropolitan Medical Center														
Bird S Coler Memorial	K R Crispell	837	850	410	29		13	21	0	0	= 34	145-195		1
Flower and Fifth Avenue Hospitals	R Levine	52	1,503	83	30	3.0	2	1	1	0	= 4	125-175	FM	3
Metropolitan	K R Crispell	246	7 493	1 034	30	103 10	12	12	4	0	= 28	145-195	FM	3

Numerical and other references are listed on pages 811 through 814

9 INTERNAL MEDICINE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Percent	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961-1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance	Length of Approved Program (Years)
NEW YORK—Continued														
New York Polyclinic Medical School and Hospital	R Wallach	63	1,581	146	34	17,986	2	2	2	0	= 6	150-200	FM	3
New York University Medical Center														
University		73	2,357	84	39	13,350	5	0	0	0	= 5	145-195	FM	1
Presbyterian	S L Bradley	104	2,183	230	68	92,569	12	8	1	0	= 21	250-417	PM	3
Queens Hospital	A A Fischl	314	4,967	1,237	32	22,517	7	5	3	0	= 15	145-195		3
Roosevelt	A J Antenucci, J Preston	117	3,133	252	43	7,320	8*	4	2	0	= 14	158-275	PM	3
St Barnabas	A J Patek, Jr	267	2,441	151	50	7,950	2	2	0	0	= 4	75-125	FP	2
St Catherine's	M A Bonventre	87	1,442	197	36	3,555	2	1	0	0	= 3	125-150	FM	3
St Clare's	V C Ancona	85	2,114	168	46	7,909	2	2	2	0	= 6	125-150	PM	3
St John's Episcopal	J R Marzullo	61	1,437#	107	26	2,870	3	1	1	0	= 5	175-210	FM	3
St Luke's	T B Van Itallie	162	3,139	221	54	32,382	8	4	4	0	= 16	125-175	FM	3
St Mary's	A Annunziata	43	809	96	24	2,157	1	1	0	0	= 2	225-225	FM	1
St Vincent's	W J Grace	178	4,423	527	47	42,144	3	5	5	0	= 13	175-225	FM	3
Staten Island	D G Neblett	6	2,319	220	38		1	0	0	0	= 1	200-200	FM	1
Sydenham	F Appelbaum	63	1,003	71	18	10,159	2	1	0	0	= 3	145-195		1
Veterans Admin (Bronx) [288]	J Wolf	519	5,967	353	55	1,430	17*	14	10	2	= 43	270-412	O	3
Veterans Admin (Brooklyn) [291]	P W Spear	156	1,469	221	62	1,872	15	13	8	0	= 36	271-347	O	3
Veterans Admin (Manhattan) [-]	I I Smith	170	1,606	241	70	201	8	16	8	0	= 32	271-348	O	3
Port Chester														
United Hospitals	N Schwartz	56	2,441	151	39	3,087	2	0	0	0	= 2	235-250	PM	1
Rochester														
Genesee	H L Segal	70	2,266	222	72	6,871	2	2	1	0	= 5	175-350	FM	3
Highland	J W Holler	62	1,775	184	63	1,059	2	2	1	0	= 5	175-350	FP	3
Rochester General	L Horn	93	2,097	298	57	1,039	4*	3	3	0	= 10	175-225	FP	3
St Mary's	J W Quinlan					4,515	1	1	1	0	= 3	250-325	PM	3
Strong Memorial Rochester Municipal	I E Young	149	4,271#	486	71	18,468	14	6	1	0	= 21	166-291	O	3
Schenectady														
Ellis	M F Moravec	99	3,050	335	46	1,502	3	3	1	0	= 7	325-400	FP	3
Syracuse														
State University of New York														
Upstate Medical Center	J Liebna	311	6,973	655	52	19,828	12	12	12	0	= 36	250-350	O	3
Veterans Admin	B V Jager	115	1,491				5	4	4	0	= 13	271-347		
Valhalla														
Grasslands	G S Watson	76	1,361	263	58	16,484	2	3	3	0	= 8	175-225	FM	3
White Plains														
White Plains	D Fertig	40	1,513#	162	37	2,121	1	1	1	0	= 3	175-200	FP	3
NORTH CAROLINA														
Chapel Hill														
North Carolina Memorial	C H Burnett	58	2,130	112	65	9,651	8	7	1	0	= 16	175-266	O	3
Charlotte														
Charlotte Memorial	R S Bigham Jr	75	2,496#	138	61	7,316	1	1	1	0	= 3	295-345	PM	3
Durham														
Duke University Affiliated Hospitals	E A Stead	87	3,514	201	71	23,914	20	15	10	2	= 47	43-260	FM	
Duke	E H Estes	151	2,512#	194	75		4	2	4	2	= 12	270-462	O	
Veterans Administration	J H Manning	80	3,634	150	33	3,087	2	2	1	0	= 5	300-350	FM	3
Watts							1	1	1	0	= 3	315-420	PM	3
Winston Salem														
City Memorial	C H Reid	95	3,868	188	33		7	6	2	0	= 15	166-208	PM	3
North Carolina Baptist	L H Yount	114	5,107#	218	57	7,880								
NORTH DAKOTA														
Bismarck														
Bismarck	C H Peters	50	2,074#	112	29	958	2	0	0	0	= 2	300-475	PM	1
Fargo														
St Luke's	I L Wold	56	1,966	134	47		2	0	0	0	= 2	300	FM	1
OHIO														
Akron														
Akron City	P I Bliss	134	4,296			10,159	2	2	2	0	= 6	275-325	FP	3
Akron General	H Kraus	122	3,578	319	51	14,311	5	4	2	0	= 11	300-350	FM	3
St Thomas	W J Pittenger	82	2,911	249	48	8,938	2	2	1	0	= 5	250-350	FP	3
Canton														
Aultman	H J Jekes	185	6,985	357	37	3,369	3	3	1	0	= 7	275-400	PM	3
Mercy	M I Moots	105	4,007	187	44	2,319	2	2	2	0	= 6	275-300	PM	3
Cincinnati														
Christ	C E Richards	67	1,772	246	40	8,706	2	2	2	0	= 6	200-250	FM	1
Daniel Drake Memorial		686	662	572	52		6*	0	0	0	= 6	400-600	FM	1
Good Samaritan	W C Vester	180	5,100	460	40	1,650	2	2	2	0	= 6	250-300	FM	3
Jewish	J G Margolin	112	3,106	329	44	7,330	5	3	1	0	= 12	195-235	FP	3
St Mary's	F A Schlueter	59	1,894	172	33	4,047	2	2	1	0	= 5	275-325	FM	3
University of Cincinnati College of Medicine Hospital Group														
Cincinnati General	R W Vilter	94	2,057	429	57	34,661	12	8	10	1	= 31	175-350	PM	
Veterans Administration	R Vilter	73	1,266	144	72	701						271-462	O	
Cleveland														
Cleveland Clinic	A C Lunstene	24	658	60	53	8,091	15	12	12	0	= 39	275-300		3
Cleveland Metropolitan General	C H Rammelkamp, Jr	93	2,037	300	57	13,816	4	6	6	4	= 20†	150-258	FM	3
Fairview Park	H E Christman	73	2,917#	165	46	2,188	2	2	2	0	= 6	250-350	FP	3
Highland View—Cuyahoga County	D Weir	482	926	339	47		3	3	1	0	= 9	240-295	PM	1
Huron Road	F A Marshall	122	3,948	268	57	2,045	2	2	2	0	= 6	210-225	FP	1
Lutheran	M E Bobey	66	2,281	180	50		3	2	1	0	= 6	250-275	PM	3
Mount Sinai	M L Siegel	126	3,037	355	43	16,448	6	4	1	0	= 11	215-235	FM	3
St Alexis	R R Bartunek	115	3,761	261	37	2,855	2	1	1	0	= 4	225-275	FMO	1
St John's	W J Fayen	83	3,376	177	32	710	3	2	0	0	= 5	225-300	FM	1
St Luke's	A D Nichol	112	3,941	301	51	15,342	3	2	1	0	= 6	200-270	FM	3
St Vincent Charity	H A Zimmerman	142	4,084	270	38	23,780	4	2	2	0	= 8	210-235	FP	3
University Hospitals of Cleveland	R H Ebert	127	3,937	417	69	31,901	12*	10	8	0	= 30	150-250	PM	3
Veterans Administration [23-310]	N P Shumway	301	2,037	311	61	449	4	11	11	0	= 26	271-462	PM	4
Cleveland Heights														
Doctors	J W Martin	79	2,177	132	43		2	1	1	0	= 4	300-325	FP	3
Columbus														
Mount Carmel	P T Knies	111	3,517	264	48	2,042	2	2	2	0	= 6	275-325	FP	3

Numerical and other references are listed on pages 811 through 814

9 INTERNAL MEDICINE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Maintenance FM PM O	Length of Approved Program (Years)
OHIO—Continued														
Ohio State University Hospitals														
University	B K Wiseman C A. Doan	168	5 674	408	63	35 148	8	6	4	3	= 21	177 277	PM	3
White Cross	R H Jacques	89	2 792‡	191	83		2	1	1	0	= 4	290-340	PM	3
Dayton														
Good Samaritan	C E Gerson	133	3 190	160	31		1	1	1	0	= 3	250-275	FM	1
Miami Valley [314]	K D Arn	258	5 745‡	437	44	2 960	2	2	2	0	= 6	225-250	FP	3
Veterans Administration [315]	S Simerman	193	1 573	183	99	738	10	6	6	0	= 22	271 347	O	3
Garfield Heights														
Marymount	F J Hruby	54	2 085	185	85	718	2	2	2	0	= 6	250-300	FM	3
Hamilton														
Mercy	C A Schuck	77	2 438	248	33		2	2	1	0	= 5†	200 300	FM	1
Lakewood														
Lakewood	J T Ledman	92	2 240	216	35	2 005	3	0	0	0	= 3	200 200	FP	1
Lima														
Lima Memorial	L N Irvin	101	4 544‡	301	35	3 567	1	0	0	0	= 1	300 350	FM	1
St Rita's	H G Doerhake	41	1 684	117	31	3 905	1	0	0	0	= 1	400-450	PM	1
Toledo														
Maumee Valley	G M Todd	90	2 728	266	31	11 949	3	3	3	0	= 9	285 325	FP	3
St Vincent's	M A Schnitker	153	5 251‡	351	42	4 803	1	1	0	0	= 2	275 325	FP	3
Toledo	J L Kobacker	139	4 891	381	54		1	1	1	0	= 3	275 325	FM	3
Warren														
Trumbull Memorial	J R McKay	79	3 567	228	44		2	2	2	0	= 6	300 400	FP	3
Youngstown														
St Elizabeth	L Caccamo	80	2 241	100	44	1 772	2	2	2	0	= 6	300-350	FM	3
Youngstown	F S Coombs	263	7 653	462	44	4 439	4	3	2	0	= 9	275 375	FM	3
OKLAHOMA														
Oklahoma City														
St Anthony	P M McNeill	62	2 085	314	22	4 211	1	1	0	0	= 2	300-350	FM	2
University of Oklahoma Medical Center							12	10	4	0	= 26			3
University Hospitals [318]	S Wolf	67	1 560	163	65	16 675						200 275	PM	
Veterans Admin	J F Hammarsten	129	1 877	178	72	1 432								
Wesley	W W Rucks Jr	59	1 642	147	48		1	0	0	0	= 1	350 350	PM	1
Tulsa														
St John's	W J O Melin	130	4 415	259	28	2 221	1	1	1	0	= 3	175-250	FP	3
OREGON														
Portland														
Emanuel	D K Taylor	81	4 256‡	256	50		1	1	1	0	= 3	275-295	PM	3
Good Samaritan	W C Panton		3 831‡	147	68	5 696	2	2	2	0	= 6	275 295	PM	3
Providence	R Crommelin	91	4 352	196	60		1	1	1	0	= 3	275-300	PM	3
St Vincent	C W Coffen	95	4 589	217	51	405	2	2	2	0	= 6	275-295	PM	3
University of Oregon Medical School														
Hospitals and Clinics	H P Lewis	120	3 254	410	64	25 521	4	3	3	0	= 10	165-215	FM	3
Veterans Administration	L W Ritzmann	98	2 227	220	80	2 179	7	8	4	0	= 19	270-349	PM	3
PENNSYLVANIA														
Abington														
Abington Memorial	J T Beardwood Jr	85	2 798	263	46	5 697	2	1	1	0	= 4	275-375	FM	3
Allentown														
Allentown	H E Everett	131	2 350	315	30	2 618	1	1	1	0	= 3	225 275	FM	3
Sacred Heart	A W Dubbs	155	3 110	266	46	3 168	1	1	0	0	= 2	225 275	FP	2
Bethlehem														
St Luke's	R K Shields		3,302	392	33	4 095	2	1	1	0	= 4	225 300	FP	3
Bryn Mawr														
Bryn Mawr	J A Wagner	14	2 764	282	60	5 239	3	2	1	0	= 6	200 250	FP	3
Danville														
George F Geisinger Memorial	J A Collins	68	2,353	146	59	13 648	4	2	2	0	= 8	175-225	FM	3
Easton														
Easton	J Kincov	87	2 455	301	54	2 310	1	1	1	0	= 3	250-250	FP	3
Erie														
Hamot	J B Fredway	96	3 417	269	31	1 378	1	1	0	0	= 2	250 275	FM	2
St Vincent	R E Schmidt	36	1 215	75	31	1 489	1	1	1	0	= 3	275 375	FM	3
Harrisburg														
Harrisburg	J A Daugherty		3 917	404	31	9 590	2*	2	1	0	= 5	250	FP	3
Harrisburg Polyclinic	A W Cowley	130	3 671	340	45	3 958	3	0	0	0	= 3	250 375	FM	3
Philadelphia														
Albert Einstein Medical Center														
Northern Division	B Gouley	78	3 525	454	44	3 806	6	4	2	0	= 12	125-200	FM	3
Southern Division	T Mendell	101	2 164	180	44	2 753	2	2	1	0	= 5	125-200	FM	3
Chestnut Hill	R M Truitt Jr	56	1 453	135	51	650	1	1	0	0	= 2	350 350	FM	2
Episcopal	S R Vogel	108	2 272	292	35	11 215	2	2	2	0	= 6	150 150	FM	3
Frankford	G E Mark	45	1 364	166	35		1	0	0	0	= 1	275-	FP	1
Germantown Dispensary and Hospital	R W Mays	89	2,393	313	39	19 151	2	1	0	0	= 3	175-200	FM	3
Graduate Hospital of the University of Pennsylvania	H J Lumen	58	1 648	122	59	3 983	3	2	2	0	= 7	75 100	FM	3
Hahnemann Medical College and Hospital	J H Moyer	138	3 760	175	55	18 290	6	6	4	2	= 18	75 75	FM	3
Hospital of the University of Pennsylvania	F C Wood	206	5 378	337	64	16 432	7	3	2	1	= 13		PM	3
Hospital of the Woman's Medical College of Pennsylvania	W I Gefter	46	1 273	101	50	1 831	1	1	1	0	= 3	125-175	FM	3
Jefferson Medical College	R I Wise	109	2 688	323	46	12 275	1	8	5	3	= 17	100 150	PM	3
Lankenau	D B Pierson Jr	106	2 929	217	52	351	2	2	2	0	= 6	200-250	FM	3
Mercy-Douglass	E E Holloway	33	1 059	98	44	1,024	3	1	0	0	= 4	200-250	FM	2
Methodist Episcopal	H F Robertson	61	1 721	121	27	7 958	2	0	0	0	= 2	150-200	FM	1
Misericordia														3
Nazareth	S J Skromak	43	1 429	106	43	712	1	0	0	0	= 1	300-300	FM	1
Pennsylvania	G G Duncan		3 096	291	48	15 110	4	4	3	0	= 11	20-40	FM	3
Philadelphia General	D Cooper C Thompson	196	4 004	948	55	33 754	7	7	7	0	= 21	128-265	FM	3
Presbyterian	F Fetter	69	1 961	172	51	3 148	2	1	1	0	= 4	235 290	FM	3
Temple University	T M Durant	173	5,323	457	56	26 960	6	6	6	0	= 18	175-225	PM	3
Veterans Administration	H P Close	240	3 609	319	81		6	6	6	0	= 18	270-402	O	3
Pittsburgh														
Allegheny General	T E Thompson Jr	98	2 664	353	37	6 843	1	1	1	0	= 3	200-250	FM	3

Numerical and other references are listed on pages 811 through 814

9 INTERNAL MEDICINE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	FMaintenance FM PM O	Length of Approved Program (Years)
PENNSYLVANIA—Continued														
Health Center Hospitals of the University of Pittsburgh School of Medicine														
Elizabeth Steel Magee	C R Schaefer	82	1 579	128	60	66	1	1	1	0	= 3	125-175		3
Presbyterian	J D Myers	137	3 479	261	72		4	4	8	2	= 18	125 175	FM	
Veterans Administration	G A Edwards	376	3 786	423	67		4	4	4	0	= 12	270 347	O	
Mercy	J M Johnston	164	4 218	375	58	11 838	2	2	2	0	= 6	235 285	FM	3
Montefiore	J H Silverberg	108	3 625	288	45	13 021	3	3	2	0	= 8	225 275	FM	3
Pittsburgh	J R Friday	67	1 807	153	24	2 259	1	0	0	0	= 1	200-300	FM	1
St Francis General	F Conclius	106	2 803	271	37	2 599	3	2	1	0	= 6	240 305	FP	3
St Margaret Memorial	C E Bowen		1 245	79	56	1 624	1	0	0	0	= 1	300-300	FM	1
Western Pennsylvania	R I Forsyth	42	1 322#	65	66	14 085	2	2	2	0	= 6	250 300	FP	3
Reading														
Reading	J R Spannuth		3 536	419	32	2 475	2	2	2	0	= 6	225 300	FM	3
Sayre														
Robert Packer	S D Conklin	71	4 485	148	57	15 159	3	3	3	0	= 9	235 325	PM	3
PUERTO RICO														
Caparra Heights														
University	R S Diaz Rivera	60	1 078	135	64	7 648	4	2	0	0	= 6	250 350	FM	3
Ponce														
Ponce District General	H Rodriguez	79	2 016	171	62	13 641	3	3	3	0	= 9	250 350	FM	3
San Juan														
San Juan City	R S Diaz Rivera	53	946	188	72	44 366	4	4	4	0	= 12	175 325	FM	3
Veterans Administration (San Patricio) [48]	F A Ramirez	89	1 741	52	83	22 924	3	3	3	0	= 9	318 408	O	3
RHODE ISLAND														
Newport														
Rhode Island Affiliated Hospitals														3
Newport	H W Brownell	5	2 168	127	35		1	0	0	0	= 1	150 200	FM	
Memorial (Pawtucket)	A M Burgess	45	1 612			4 463	0	1	0	0	= 1	250 250	FM	
Miriam (Providence)	A M Burgess	71	1 660	144	31		0	0	1	0	= 1	250 250	FM	
Providence														
Rhode Island	M N Fulton	157	4 562	584	40	15 930	8	2	2	0	= 12	125 175	FM	3
Veterans Administration	J D Fyre Jr	156	2 003	174	92	1 282	1	1	0	0	= 2	270 462	O	2
SOUTH CAROLINA														
Charleston														
Teaching Hospitals of the Medical College of South Carolina	V Moseley	109	4 527	291	40	11 900	6	3	3	0	= 12	138 168	FM	3
Columbia														
Columbia Hospital of Richland County	C W Irvin Jr	105	3 860	277	26		1	0	0	0	= 1	200 250	FP	1
TENNESSEE														
Chattanooga														
Baroness Erlanger	R Myers	122	5 294	405	37	21 593	4	2	1	0	= 7	325 375	FM	3
Knoxville														
St Mary's Memorial	L C Sienknecht	102	3 999	253	36	503	2	1	0	0	= 3	250 275	FP	2
University of Tennessee Memorial Research Center and Hospital	R B Wood	57	2,150	202	38	3 435	1	1	1	0	= 3	320 340	FM	3
Memphis														
Baptist Memorial	P Milnor Jr	190	8 396	411	43	2 123	2	2	2	0	= 6	325 375	PM	3
City of Memphis Hospitals	J I Tullis		2 348	601	52	6 393	6	6	4	0	= 16	150 200	FP	3
Methodist	C Stevenson		5 914	224	27		1	0	0	0	= 1	325 325	FM	1
St Joseph	S Blackwell	60	2 971	154	27	1 680	1	0	0	0	= 1	325 375	FM	1
Veterans Administration [47]	F S Dietrich	254	4 218	214	76	3 556	5	5	5	0	= 15	271 347	PM	3
Nashville														
Baptist	C C Woodcock	72	3 301	194	33	416	3	0	0	0	= 3	300 300	FM	1
George W Hubbard	R S Anderson	48	1 015	180	53	10 780	3	2	1	0	= 6	150-200	FM	3
St Thomas	I Grossman	59	2 171	197	41		2	2	1	0	= 5	300 300	FP	3
Vanderbilt University Affiliated Hospitals														
Nashville General	T G Pennington	35	1 572	206	28	11 157	2	0	0	0	= 2	325 375	FP	1
Vanderbilt University	D F Rogers	93	3 233	153	65	22 134	0	7	4	3	= 14	100 125	FM	3
Veterans Administration	R France	165	2 353	189	68		3	1	1	0	= 5	270 462	O	3
Oak Ridge														
Oak Ridge Institute of Nuclear Studies Medical Division [71]	C A Andrews	17	382	97	86	612	0	0	0	2	= 2	450 450	O	1
TEXAS														
Dallas														
Baylor University	R Tompsett	119	5 307	428	47	2 615	3	2	1	0	= 6	210 230	PM	3
Methodist	A Haley	55	3 176	183	26	2 818	2	1	1	0	= 4	225 275	FP	3
Parkland Memorial	D Seldin	105	2 669	382	47	68 577	11	10	5	1	= 27	150 200	PM	3
St Paul	P Q Needham	83	3 693	243	43	6 562	2	2	2	0	= 6	225 275	FP	3
Veterans Administration [47a]	B Friedman	152	1 899	175	79	849	8	4	3	0	= 15	271 347	PM	3
Fort Worth														
Harris	K Wiggins	97	3 423	177	37	118	1	1	0	0	= 2	300 350	FP	2
Galveston														
University of Texas Medical Branch Hospitals [16]	J V Warren	207	3 694	310	50	28 213	8	8	5	0	= 21	160 160	FP	3
Houston														
Baylor University College of Medicine														3
Affiliated Hospitals	R D Pruitt	92	1 776	376	42	50 902	6	6	4	0	= 16	125 165	FM	
Jefferson Davis	H W Cummings Jr	70	3 536	130	62	7 59	1	1	1	0	= 3	100 175	FM	
Methodist	H D Bennett	251	3 620	298	78	4 650	8	8	8	0	= 24	270-412	PM	
Veterans Administration	E A Wilkerson	174	6 404	378	48	21 410	3	3	3	0	= 9	125 175	FM	3
Hermann	A A Ledbetter	149	8 435	239	31	9 545	1	0	0	0	= 1	220	PM	1
Memorial	S Schnur	75		93	50	485	0	1	0	0	= 1	220 270	PM	1
St Joseph's	P V Ledbetter	50	2 470	113	39		3	0	0	0	= 3	100 100	FM	1
St Luke's Episcopal														
University of Texas M D Anderson Hospital and Tumor Institute	C D Howe	81	1 414	270	76	12 245	2	2	2	2	= 8	300 300	O	1
McKinney														3
Veterans Administration	G W Winkelman	136	1 638	88	78		2	2	1	0	= 5	270 412	O	

Numerical and other references are listed on pages 811 through 814

9 INTERNAL MEDICINE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Includ. transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main tenance FM PM O	Length of Approved Program (Years)
TEXAS—Continued														
San Antonio														
Robert B Green Memorial	L B Reppert	29	1 104	275	42	17 227	2	2	0	0	= 4	150-250	FM	2
Temple														
Scott and White Memorial [309]	J G Rodarte	103	6 011	115	46	44 131	4	4	4	0	= 12	300 300	O	3
UTAH														
Ogden														
Thomas D Dee Memorial	W P Daines	32	2 368	168	61	711	2	0	0	0	= 2	325 350	PM	1
Salt Lake City														
Dr W H Groves Latter Day Saints	F L Wilkinson	89	4 908	349	41	10 276	3	2	2	0	= 7	250 325	FP	3
Holy Cross	G R Gross	47	1 771	109	40		1	0	0	0	= 1	175-400	FP	1
St Marks	R F McDonald	45	2 142	123	61		1	0	0	0	= 1	275-275	PM	1
University of Utah College of Medicine Affiliated Hospitals														3
Salt Lake County General	M M Wintrobe	126	1 108	266	66	25 041	9	4	4	0	= 17	250 375	O	3
Veterans Administration	H Brown	71	862	70	100		4	3	3	0	= 10	271 462	O	3
VERMONT														
Burlington														
University of Vermont Affiliated Hospital														2
DeGoesbriand Memorial	C M Terrien	46	1 101#	116	52	3 934	2	2	0	0	= 4	208 208		
Mary Fletcher	E I Amidon	43	1 902	94	71	3 956	3	3	0	0	= 6	166	O	
White River Junction														
Veterans Administration	See Dartmouth Medical School Affiliated Hospitals Hanover N H													
VIRGINIA														
Alexandria														
Alexandria	S H Williams	39	1 641#	150	37	4 879	3	0	0	0	= 3	275 350	PM	1
Charlottesville														
University of Virginia	W Parson	89	2 648			13 288	6	2	2	0	= 10	75 150	FM	3
Clifton Forge														
Chesapeake and Ohio	A Williams	63	3 049	115	45	6 175	4	4	0	0	= 8	200-300	FM	1
Newport News														
Riverside	E L Alexander Jr	58	2 209#	168	26		2	0	0	0	= 2	250 300	FM	1
Norfolk														
DePaul	R B Gahagan	54	2 470	181	40	6 050	1	1	1	0	= 3	225 275	FM	3
Norfolk General	J Franklin						2	1	1	0	= 4	215-315	FM	3
Richmond														
Johnston Willis	J M Hutcheson	86	2 955#	160	44		2	0	0	0	= 2	250 250	FM	1
Medical College of Virginia Affiliated Hospitals														3
Medical College of Virginia-Hospital Division	W L Thompson Jr	140	4 760	482	39	27 736	15	6	3	0	= 24	100 150	FM	
Veterans Administration	F A Wade	379	3 935	249	73		9	9	9	0	= 27	271 412	PM	
Roanoke														
Jefferson	H Sieber	38	1 196	89	55	2 099	1	0	0	0	= 1	200 200	FM	1
Lewis Gale	R H Jones Jr	79	2 985	100	39	22 555	3	1	1	0	= 5	350-400	FP	3
Roanoke Memorial	C L Crockett Jr	111	3 888	191	48	3 421	1	1	1	0	= 3	350-350	FP	3
WASHINGTON														
Seattle														
Doctors	N Arcese	42		185	44		1	1	0	0	= 2	250	FM	1
Providence	F W Houk	76	2 847#	236	48	1 075	2	1	0	0	= 3	250 350	FP	2
Swedish	R C Manchester	85	3 913	290	62		2	0	0	0	= 2	225-275	FP	1
University of Washington College of Medicine Affiliated Hospitals														3
King County Unit No 1 (Harborview)	R H Williams	75	2 957#	465	67	43 018	20*	18	4	0	= 42	150 325	FM	
University	R H Williams		196#	18	88	1 110	16	15	3	0	= 34	180 305	PM	
Veterans Administration	R H Williams	87	1 639	191	91	1 184	6	5	2	0	= 13	271 347		
Virginia Mason	R L King	49	2 707	112	75		2	2	2	0	= 6	125 225	FP	3
Spokane														
Deaconess	A M Clark Jr	47	3 340	221	45		1	0	0	0	= 1	300 350	FM	1
WEST VIRGINIA														
Beckley														
Beckley Memorial	A D Kistin	66	1 132	112	63	28 800	3	3	3	0	= 9	400 500	PM	3
Charleston														
Charleston General	W A Thornhill Jr	58	2 554	132	39	850	2	2	1	0	= 5	225 275	FP	3
Memorial	W C Stewart	65	2 513	128	49	6 018	2	1	1	0	= 4	250 300	PM	3
Huntington														
Cabell Huntington							2	0	0	0	= 2	250-300	FM	1
Chesapeake and Ohio	J F Otte	77	2 530	111	42	23 643	2	2	1	0	= 5	200-250	FM	1
Wheeling														
Ohio Valley General	H R Sauder	309	3 769	193	33	6 134	3	2	1	0	= 6	300 375	PM	3
Williamson														
Memorial Medical Center	C A Jones	46	1 130	55	36	16 300	3	3	3	0	= 9	400 500	PM	3
WISCONSIN														
La Crosse														
La Crosse Lutheran	I E Gundersen	28	1 416	50	18		1	1	0	0	= 2	300 300	FM	2
Madison														
Madison General	R Rotter	53	2 033	164	24		2	0	0	0	= 2	200 200	FP	1
St Marys [3 8]	F K Ryder	78	2 214	154	56		1	1	1	0	= 3	250-350	FM	3
University Hospitals [879]	O O Meyer	102	4 124	108	76	5 549	12	8	4	0	= 24	100 200	FM	3
Milwaukee														
Columbia [350]	H W Pohle	89	2 886#	141	74		1	1	1	0	= 3	270-320	PM	3
Milwaukee County	W W Engstrom	190	6 158	949	43	54 020	10	10	10	1	= 31	229-434	O	3
Milwaukee [3 8]	O Royce						2	0	0	0	= 2	281 331	PM	3
Mount Sinai	M J Lustok	82	2 942	230	40	3,369	3	2	1	0	= 6	300 350	FM	2
St Joseph s	P G La Bissoniere	65	2 312	172	47		2	0	0	0	= 2	300 350	FP	2
St Lukes	A Baier	71	2 745	190	45	281	2	0	0	0	= 2	275-315	FM	1
St Marys	M C F Lindert	10	1 416	130	66		1	0	0	0	= 1	300 395	O	1
Veterans Administration (Wood) [21]	M W Garry	326	3 513	300	75	8 368	6	3	3	0	= 12	271 347	PM	3

Numerical and other references are listed on pages 811 through 814

10 NEUROLOGICAL SURGERY

Residency programs in the following hospitals have been approved by the Council and the American Board of Neurological Surgery, through the Residency Review Committee for Neurological Surgery, as offering acceptable training in the specialty

Hospitals, 124, Residencies, 412

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O	Length of Approved Residency (Years)
UNITED STATES ARMY														
DISTRICT OF COLUMBIA														
Walter Reed General Washington	G I Hayes	93	809	46	93	1,380	1	1	1	1	= 4			4
NONFEDERAL AND VETERANS ADMINISTRATION														
ALABAMA														
Birmingham														
University of Alabama Medical Center University Hosp and Hillman Clinic	G Galbraith	35	1,350	71	37	366	0	1	1	1	= 3	118 125	FM	4
CALIFORNIA														
Long Beach														
Veterans Administration [91]	J D French	45	334	39	77	1 147	1	1	1	1	= 4	271-462	O	4
Los Angeles														
Los Angeles County	F M Anderson P Vogel	61	1,713	198	84	1 818	1	1	1	2	= 5	273 337	PM	4
University of California Medical Center														4
University	W I Stern	15	386	20	72	794	1	1	1	1	= 4	240 426	FP	
Veterans Administration	W F Stern	31	353	30	83	369	0	1	0	0	= 1	293 463	PM	
White Memorial [10]	K H Abbott	13	193	24	76	2 080	1	1	1	1	= 4	21 280	PM	4
Pasadena														
Collis P and Howard Huntington Memorial	C H Shelden	16	539	16	78	250	1	1	1	1	= 4			4
San Francisco														
University of California Hospitals														4
Franklin	H Brown	25	709	11	36		2	0	0	0	= 2	200 300	FM	
University of California	J F Adams	26	710	42	79	1 208	2	2	2	2	= 8	243-426		
Veterans Admin	O W Jones Jr	18	153	21	76	224	0	0	1	0	= 1	271-462	O	
COLORADO														
Denver														
University of Colorado Medical Center														4
Colorado General	K Welch	9	290	21	86	374	1	1	1	1	= 4	180 205	O	
Denver General	C G Freed		185#	33	97							179 205		
Veterans Administration	W K Welch	3	105	7	100		0	0	1	0	= 1	271 462	O	
CONNECTICUT														
New Haven														
Yale New Haven Medical Center														4
Grace-New Haven Community	W I German	22	550	30	63	417	0	1	0	1	= 2	75 125	FM	
Hartford (Hartford Conn)	W B Scoville	27	1,166	55	78	245	0	2	2	1	= 5	125 282	FP	
DISTRICT OF COLUMBIA														
WASHINGTON														
Georgetown University Affiliated														4
Hospitals		3	66#	5	100							225 225	PM	
Children s		48	507	67	53	2 240	2	2	1	0	= 5	233 283	O	
District of Columbia General	J W Watts O H Fulcher	11	365	22	72	90	1	1	1	1	= 4	175 300	FM	
Georgetown University [1-8]	O H Fulcher											-		4
George Washington University Hospitals														
Children s														
District of Columbia General	J W Watts	13	402	18	91	335	2	1	1	1	= 5	210 300	PM	
George Washington Univ [1-8]														
GEORGIA														
Atlanta														4
Emory University Affiliated Hospitals														
Emory University	J P Fincher	13	430#	22	73		1	1	1	1	= 4†	235-265	PM	
Grady Memorial	J P Fincher	10	243	37	25		1	1	1	1	= 4	100-200	FM	
Augusta														4
Medical College of Georgia Hospitals														
Eugene Talmadge Memorial	G Smith	17	422	25	76	1 040	1	1	1	1	= 5†	250 383	O	
University	P Nichols													
Veterans Administration														
ILLINOIS														
Chicago														4
Chicago Wesley Memorial	P C Bucy	20	529	30	67		0	0	1	2	= 3	175 225	FM	
Loyola University (Stritch School of Medicine) Affiliated Hospitals														4
Mercy	H C Voris	25	534	41	61	164	1	1	1	1	= 4	225 500	FM	
Veterans Admin (Hines)	F Oldberg	40	400	40	58	689	1	0	0	1	= 2	271 412	O	4
Northwestern University Medical Center														
Chicago Wesley Memorial	P C Bucy	20	529	30	67		0	0	1	2	= 3	175 225	FM	
Passavant Memorial	J Davis	8	185	7	86		0	1	0	0	= 1	225 275	FM	
Veterans Administration Research	J Davis	29	306	15	73		1	0	0	1	= 2	271 462	O	
Evanston (Evanston)	J Larkington	8	93	12	61	152	0	1	0	0	= 1	225 275	PM	3
Presbyterian St Luke s	J Oldberg	18	111	12	90		1	1	0	0	= 2	125 200	FM	4
University of Chicago Clinics	J P Evans	20	478	92	78	1 746	1	1	1	1	= 4	250 300	O	
University of Illinois Research and Educational Hospitals	J Oldberg		Inc in Neur											4
INDIANA														
Indianapolis														4
Indiana University Medical Center														
Indiana University Medical Center Hospitals	R I Hemburger	50	815	43	72	760	1	1	1	1	= 4	225-300	PM	
Veterans Administration												271 462	O	
IOWA														
Iowa City														4
State University of Iowa Hospitals	R Meyers	21	603	59	82		1	1	1	1	= 4	200 285	FM	

Numerical and other references are listed on pages 811 through 814

10 NEUROLOGICAL SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	F Main M Maintenance PM O	Length of Approved Program (Years)
KANSAS														
Kansas City														
University of Kansas Medical Center	W William on	15	549	27	78	517	1	1	1	1	= 4	125-200	PM	4
KENTUCKY														
Louisville														
University of Louisville Medical Center		39	804	85	56	782	1	1	1	1	= 4	116-200	FM	4
Children s	I H Seyerberg													
Louisville General	R G Spurling													
Norton Memorial	P Ime													
Veterans Administration	R G Spurling													
LOUISIANA														
New Orleans														
Charity Hospital of Louisiana														
Tulane University Unit [1]	R C Llewellyn	11	185	44	43	781	1	0	0	0	= 1	200-225	FM	1
Ochsner Foundation [1]	D H Echol	11	406	12	92	2 153	1	1	1	1	= 4	225-300	PM	4
MARYLAND														
Baltimore														
Johns Hopkin	A E Walker	32	775=	46	52	826	3	2	1	1	= 7	160-227	PM	4
Baltimore City Hospital	I D McQueen	13	199	23	40	463	0	0	1	0	= 1	225 225	FI	4
Univer ity	I C Arnold Jr	38	829	68	66	730	1	2	2	1	= 6	200-250	PM	4
MASSACHUSETTS														
Boston														
Boston City	W Wegner	25	317	36	42		1	1	1	1	= 4	155-248	FM	4
Children s Medical Center-Peter Bent Bri ham	E Inglebrin	16	496	23	74	1 353	1	1	1	1	= 4	41 83	FM	4
Mas achusett General	I C White						2	2	1	1	= 6	108 183	FM	4
Veterans Admini tration (Jamaica Plain)	I H Drew	25	425	42	30									
New England Center	B Silver tone	12	392	16	100	654	1	1	1	1	= 4	237 304	O	4
MICHIGAN														
Ann Arbor														
Univer ity	F A Kuhn	29	790	58	79	2 173	0	2	2	3	= 7	215-275	O	4
Wayne County General (Flor e Mich)														1
Detroi														
Grace	F S Gurdjian	22	417	42	76	131	1	1	1	1	= 4	275-350	FP	4
Henry Ford	R S Knighton	26	601	29	73	3 681	1	1	2	1	= 5	265 365	PM	4
MINNESOTA														
Minneapolis														
University of Minne ota Hospital [10]	L A French	22	535	28	64	670	2	2	1	2	= 7	244 244		4
Rochester														
Mayo Foundation	J C Love		2 523	66	79		8	8	8	8	= 32	200 333	PM	4
MISSISSIPPI														
Jackson														
University of Mi i ippi Medical Center	O I Andy													4
University Ho pital		18	660#	74	72	1 030	1	1	1	1	= 4	250 325	O	
Veterans Administration		5	116#	7	71	80						270 462		
MISSOURI														
St Louis														
Barne	H Schwartz	27	556	39	82		1	1	1	1	= 4	150-150	FM	4
NEW HAMPSHIRE														
Hanover														
Dartmouth Medical School Affiliated Ho pitals	R C Fi ber													4
Mary Hitchcock Memorial		27	634	37	89	1 758	1	1	1	1	= 4	218-265		
Veterans Admini tration (White River Junction Vermont)		27	624	37	89	1 758	1	1	1	1	= 4	218 265		
NEW YORK														
Albany														
Albany	R D Whitfield	31	974#	53	78	152	1	1	1	1	= 4	195 275	PM	4
Buffalo														
Buffalo General	W B Hamby	21	484#	20	70	53	1	1	1	1	= 4	175-200	FP	4
New York City														
Albert Einstein Colle e of Medicine Affiliated Ho pitals														
Bronx Municipal Hospital Center	I M Davidoff	5	298	53	57	2 3	2	2	2	2	= 8	215-21	FM	4
Montefiore	C A Carton	44	553	52	48	200	1	1	0	1	= 3	207 252	PM	
Bellevue Hospital Center Div IV-New York Univer ity Post Graduate Medical School [6]	T I Boen	47	336	73	50	220	2	2	2	2	= 8			
Kings County Hospital Center	A Cook	71	3 467	229	50	1 908	1	1	1	1	= 4	145-195		4
Long Island College														4
Mount Sinai	S W Gros	20	320	46	78	360	2	1	1	0	= 4	164-191	PM	
New York	B S Ray	18	353	37	72	2,556	1	1	1	1	= 4	100 160	FM	4
Pre byterian (Neurological Institute)	J L Pool	76	1 030	46	52		3	3	3	0	= 9	205-263	PM	4
St Vincent s	C C De Gutierrez Mahoney	34	905	84	43	1 455	1	1	1	1	= 4	267 308	PM	4
Veterans Admini tration (Bronx) [61]	J F Scarff	34	289	17	65	169	1	1	1	1	= 4	175-250	FM	4
Rochester														
Strong Memorial-Rochester Municipal	F P Smith	13	447#	10	70	140	0	1	1	0	= 2	166-291	O	4
Syracuse														
State University of New York Upstate Medical Center														4
NORTH CAROLINA														
Chapel Hill														
North Carolina Memorial														4

Numerical and other references are listed on pages 811 through 814

10 NEUROLOGICAL SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Fee Main Maintenance	Length of Appr Provided To Exam Cs Area
NORTH CAROLINA—Continued														
Durham														
Duke University Affiliated Hospitals														4
Duke	B Woodhall	42	1,221	72	51	1,370	1	1	2	2	= 6	43 200	FM	
Veterans Administration	B Nashold	27	398#	34	74		1	0	0	1	= 2	270 462	O	
Winston Salem														
North Carolina Baptist	E Alexander	23	754#	44	64	978	1	1	1	1	= 4	166 208	PM	4
OHIO														
Cincinnati														
University of Cincinnati College of Medicine Hospital Group														4
Children s	F H Mayfield	31	505	31	58	1,123	1	0	0	0	= 1	200 200	FM	
Christ	R McLaurin	13	294	82	50	552								
Cincinnati General	F H Mayfield	20	300	30	50		0	1	0	0	= 1	275 275	FM	
Good Samaritan	R McLaurin	18	220	18	72	111						271-462	O	
Veterans Administration														
Cleveland														
Cleveland Clinic	W J Gardner	25	891	46	78	4 362	2	2	1	1	= 6	275-400		4
University Hospitals of Cleveland	F F Nulsen	16	411	17	76	709	1	1	1	1	= 4	183 250	PM	4
Cleveland Metropolitan General	B M Bloor	11	267	18	50	697						183 258	FM	
Veterans Administration	F F Nulsen	21	300	18	62	200	1	1	1	1	= 4	271-462	PM	
Columbus														
Ohio State University Hospitals														4
Children s	H E Le Fever	22	633	58	72	666	0	3	0	2	= 5	202 277	PM	
University	W P Hunt	26	853#	38	71		0	1	0	0	= 1	315 365	PM	
White Cross														
OKLAHOMA														
Oklahoma City														
University of Oklahoma Medical Center	J D Herrmann						1	1	1	1	= 4			4
University Hospitals [311]		9	168	24	50	604						200 275	PM	
OREGON														
Portland														
Good Samaritan	J Raaf		1,090#	37	84	264	1	1	1	1	= 4	275 315	PM	4
University of Oregon Medical School Affiliated Hospitals														4
University of Oregon Medical School Hospitals and Clinics	G Austin	23	491	35	86	396	1	1	1	1	= 4	165 215	FM	
Veterans Administration	G M Austin	12	180	32	78	538	0	0	1	0	= 1	271-412	PM	
PENNSYLVANIA														
Philadelphia														
Graduate Hospital of the University of Pennsylvania [328]	R A Groff	15	357	33	70	505	1	1	1	1	= 4	75-100	FM	4
Hospital of the University of Pennsylvania	R Groff	19	339	26	69	681	2	0	0	0	= 2	100 165	PM	4
Jefferson Medical College	R Jaeger	22	452	16	56	200	0	3	0	1	= 4	100-150	PM	4
Temple University [331]	M Scott	30	808	44	52	447	1	1	1	1	= 4	175 250	PM	4
Pittsburgh														
Health Center Hospitals of the University of Pittsburgh School of Medicine														4
Allegheny General	S N Rowe		339			509	0	0	0	1	= 1†	125 175	FM	
Children s	S N Rowe	13	296	22	64		1	1	1	0	= 3	235 310	FM	3
Presbyterian Woman s	F H Bragdon	36	732	41	54	360								
Mercy														
TENNESSEE														
Memphis														
University of Tennessee Medical Center Hospitals	F Murphy	73	2 713	79	48	589	2	2	1	1	= 6	325 400	PM	4
Baptist Memorial	F Murphy	33	378	55	69	1 002	2	2	1	1	= 6	150 200	FP	
City of Memphis Hospitals		27	756	45	49	224	1	1	1	1	= 4	100 125	FM	4
Nashville														
Vanderbilt University	W F Meacham													
TEXAS														
Galveston														
University of Texas Medical Branch Hospitals	S R Snodgrass	26	607	35	51	783	1	1	1	1	= 4	160 160	FP	4
Houston														4
Baylor University College of Medicine Affiliated Hospitals [367]														
Jefferson Davis	G Fahr	12	231	68	16	691	1	1	0	1	= 3	137 165	FM	
Methodist	J Greenwood Jr	29	849	37	59	12	1	1	1	0	= 3	100 175	FM	
Veterans Administration	G J Fahr	26	296	34	85		1	1	1	1	= 4	270 462	PM	
VERMONT														
Burlington														
University of Vermont Affiliated Hospitals							1	1	1	1	= 4			4
De Goesbriand Memorial	I Wallman	2	82#	4	100	43						166	PM	
Mary Fletcher [192]	R M P Donaghy	11	344	17	93	572								
VIRGINIA														
Charlottesville														4
University of Virginia Hospitals	W G Crutchfield	30	816	14	57	427	2	1	1	3	= 7	75 150	FM	
University		16	202	5	60	790	1	1	0	0	= 2	271 412	PM	
Veterans Administration (Richmond, Va)	J L Ulmer													
Richmond														4
Medical College of Virginia-Hospital Division	J M Meredith	44	1 154	90	47	862	1	1	1	1	= 4	100 175	FM	

Numerical and other references are listed on pages 811 through 814

10 NEUROLOGICAL SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O	Length of Approved Program (Years)
WASHINGTON														
Seattle														
University of Washington Affiliated Hospitals														4
King County Hospital Unit No 1 (Harbor View)	A A Ward Jr	13	376‡	81	85	443	2*	2	2	2	= 8	180-462	FM	
University	A A Ward Jr		65‡	4	100	105	2	2	1	1	= 6	180-405	PM	
Veterans Administration	A A Ward Jr			20	95	320	1	0	0	1	= 2†	271-462		
WISCONSIN														
Madison														
University Hospitals	T C Erickson	24	758	46	91	665	1	1	1	1	= 4	100-250	FM	4

11 NEUROLOGY

Residency programs in the following hospitals have been approved for THREE years of training by the Council and the American Board of Psychiatry and Neurology through the Residency Review Committee for Psychiatry and Neurology (Applicants intending to qualify for examination by the American Board of Psychiatry and Neurology Inc should refer to the Board requirements that the candidate have had at least two of the three years of his training in a program or programs approved at the two or three year level)

Hospitals 85 Residencies 370

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O
UNITED STATES ARMY													
District of Columbia													
Walter Reed General	A J Levens	55	623	3	33	2 822	2	2	2	0	= 6		
NONFEDERAL AND VETERANS ADMINISTRATION													
CALIFORNIA													
Los Angeles													
University of California [10]	A S Rose	6	170	8	75	2 959	2	2	2	0	= 6	240-314	FPO
Veterans Administration	R Baker	31	407	17	94	1 651	2	2	2	0	= 6	271 318	PM
White Memorial	L B Mann	7	293	12	75	2 189	1	0	0	0	= 1	215-215	PM
Palo Alto													
Stanford Medical Center and Affiliated Hospital													
Palo Alto-Stanford Hospital Center												250-325	O
Veterans Administration													
San Francisco													
University of California Hospitals	R B Aird	15	895	1	100	3 447	3*	4	2	0	= 9†	243 4 8	
Veterans Administration [10]	R S Aird	19	233	5	89	337	1	1	2	0	= 4	271 462	O
COLORADO													
Denver													
University of Colorado Medical Center													
Colorado General	L E Daniel	8	204	6	100	2 661	2	2	2	0	= 6†	180 205	O
Denver General	L E Daniel		150‡	12	92							179-205	
Veterans Administration	W V Huber	67	385	46	93	206	1	1	1	0	= 3	271-317	O
CONNECTICUT													
New Haven													
Yale New Haven Medical Center													
Grace-New Haven Community	G H Glaser					1,870	2	2	1	0	= 5	300-400	O
Veterans Administration (West Haven)	J L Levy	36	251	11	91	481	1	0	0	0	= 1	271 271	
DISTRICT OF COLUMBIA													
Washington													
Georgetown University [1]	D O Doherty	4	179	1		1 650	2	2	2	0	= 6	250-350	FM
FLORIDA													
Miami													
Jackson Memorial	P Schemberg		753	135	46	3 048	4	3	2	0	= 9	250 350	PM
ILLINOIS													
Chicago													
Northwestern University Medical Center	B Bohne					1 947							
Chicago Wesley Memorial	B Bohnes	23	308	6	67	410	1	0	0	0	= 1	125-125	FM
Veterans Administration Research	H Koenig	23	118	14	57		1	2	1	0	= 4	271-462	O
Veteran Administration (Hines)	E Tigay	349	634	89	54	585	4	2	0	0	= 6	271-462	O
Presbyterian-St Luke s	F J Gerty												
University of Chicago Clinics	R B Richter	8	340	13	85	3,559	1	2	1	0	= 4	250-305	O
University of Illinois Research and Educational Hospitals	E Oldberg	29	551	35	86	11 529	1	2	2	2	= 7	160-245	PM
INDIANA													
Indianapolis													
Indiana University Affiliated Hospitals													
Indiana University Medical Center Hospitals	A T Ross					1,545	3	3	3	0	= 9	225-275	PM
Marion County General	A T Ross	15	203	84	41	1 077	1	1	1	0	= 3	269-321	PM
IOWA													
Iowa City													
State University of Iowa Hospitals [17]	A L Sahs	37	1,228	46	67	2 966	2	1	1	0	= 4	200-255	FM
Veterans Administration	A L Sahs	35	409	13	93	275	0	1	0	0	= 1	694-694	PM
KANSAS													
Kansas City													
University of Kansas Medical Center	C Poser	8	307	7	71	894	2	1	1	0	= 4	125-150	PM
Veterans Administration (Kansas City Mo)	A B Williamson	38	186	20	64		1	0	0	0	= 1	271 271	O

Numerical and other references are listed on pages 811 through 814

11 NEUROLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Teaching FM PM O
KENTUCKY													
Louisville													
University of Louisville Affiliated Hospitals													
Louisville General	F Roseman					2,719	1	1	1	0	= 3	116 166	FM
Veterans Administration	I O Dein	35	281	39	64	173	1	0	0	0	= 1	270 347	O
LOUISIANA													
New Orleans													
Charity Hospital of Louisiana													
Louisiana State University Unit	R Paddison	16	494	40	65	4 032	1	1	1	0	= 3	125 175	FM
Tulane University Unit	R G Heath	20	590	22	73	4 199	1	1	1	0	= 3	125 175	FM
MARYLAND													
Baltimore													
Baltimore City Hospitals	J W Magladery	314	639	102	50	476	2	1	0	0	= 3	200 200	FP
Johns Hopkins	J W Magladery	Inc	in Int	Med			0	2	1	0	= 3	160 177	PM
University	C Van Buskirk	11	200	22	72	1 356	1	1	1	0	= 3	200 250	PM
MASSACHUSETTS													
Boston													
Boston City	D Denny Brown	19	366	11	73	4 491	5	4	2	1	= 12	158 308	FM
Massachusetts General	R D Adams					6 805	6	2	0	0	= 8	108 183	FM
New England Center	J F Sullivan	11	450	2	50	1 342	5	2	1	0	= 8	237 383	O
Veterans Administration (Jamaica Plain)	F A Quadfasel	167	606	27	74		4	4	4	0	= 12		
MICHIGAN													
Ann Arbor													
University [208]	R N De Jong	32	820	26	78	6 192	4	4	4	2	= 14	180 270	O
Detroit													
Henry Ford	L D Proctor	14	389	26	46	7 049	1	1	1	0	= 3	265 365	PM
Wayne University School of Medicine Affiliated Hospitals													
Veterans Administration (Dearborn)	J S Meyer	32	403	40	50	106	1	0	0	0	= 1	270 293	O
Detroit Memorial	J S Meyer	16	369	32	28		0	1	0	0	= 1	425 500	
Lafayette Clinic													
Receiving	J S Meyer		318	191	75	1 649							
MINNESOTA													
Minneapolis													
University of Minnesota Hospitals													
Minneapolis General	H H Noran	22	631	109	60	2 353	2	1	0	0	= 3	235 235	FM
University [216]	A B Baker	23	609	26	68	3 386	4	4	3	0	= 11	244 244	
Veterans Administration [221]	R C Gray	87	512	18	72	120	1	1	1	0	= 3	271 462	O
Rochester													
Mayo Foundation [226]	K B Corbin		3 991	50	74		6	6	6	1	= 19	200 333	PM
MISSOURI													
Kansas City													
Veterans Administration	See University of Kansas Medical Center Kansas City Kansas												
St Louis													
Barnes	J O Leary	31	881	25	92	2,515	2	1	2	0	= 5	50 175	FM
NEW JERSEY													
East Orange													
Veterans Administration [244]	I Sobin	221	401	58	73		1	0	0	0	= 1	270 462	O
NEW YORK													
Albany													
Albany Medical School Affiliated Hospitals													
Albany	F Hesser	12	106#	19	68	899	3	1	1	0	= 5	195 215	FP
Veterans Administration	J H Cullen	108	459	13	77	861	1	0	0	0	= 1	271 347	O
New York City													
Bellevue Hospital Center													
Div II—Cornell University [202]	F McDowell	35	305	28	65	2 348	2	1	1	0	= 4		
Div III—New York University College of Medicine	M B Bender	64	848	60	35	1 904	1	3	1	0	= 5		
Bronx Municipal Hospital Center	S R Kotey	35	661	89	49	2 044	2	2	2	2	= 8	215 215	FM
Kings County Hospital Center	F F Vastola	124	1 884	530	14	3 812	2	2	1	0	= 5	115 195	
Veterans Administration (Brooklyn)		120	508	52	67	508	0	1	0	0	= 1	293 412	O
Montefiore	T Lawner	48	618	63	45	2,987	3	2	2	0	= 7	207 282	PM
Mount Sinai	M B Bender	31	676	74	48	2 570	3	2	2	0	= 7	100 100	FM
New York	H Wolff						0	0	1	0	= 1	266 266	PM
Presbyterian (Neurological Institute)	H H Merritt		3,105	89	56		6	5	4	0	= 15	250 417	PM
Veterans Administration (Bronx)	C B Booth	56	469	28	50	53	1	1	0	0	= 2	270 824	O
Rochester													
Strong Memorial-Rochester Municipal Hospitals	P Garvey W K Smith	15	240	31	68	2 703	1	1	1	0	= 3	250 500	O
Syracuse													
State University of New York													
Upstate Medical Center University Hospitals	P Duffy	52	491	151	42	1 151	1	1	1	0	= 3	250 256	O
Veterans Administration													
NORTH CAROLINA													
Chapel Hill													
North Carolina Memorial	J W Farmer	8	345	32	50	890	2	2	2	0	= 6	175 266	O
Durham													
Duke	E C Kunkle	8	414	6	83	1 105	2	2	1	0	= 5	200 300	O
Winston-Salem													
North Carolina Baptist	M G Netsky	5	291#	15	40	1 011	1	1	1	0	= 3	166 200	PM
OHIO													
Cincinnati													
University of Cincinnati College of Medicine													
Hospital Group													
Cincinnati General	C Aring	23	404	161	78	2 025	2	2	2	0	= 6	160 415	FM
Veterans Administration													

Numerical and other references are listed on pages 811 through 814

11 NEUROLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths Number	Deaths Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month Min Max	FM Main FM PM O
OHIO—Continued													
Cleveland													
Cleveland Clinic	C Williams Jr	10	260	15	47	33 114	2	1	1	0	= 4	275-275	
Univer ity Hospitals of Cleveland	C Randt	5	171	1	100	835	2	2	1	0	= 5	375-500	PM
PENNSYLVANIA													
Philadelphia													
Hospital of the Univer ity of Pennsylvania	G Gammon	21	522	28	57	3 084	2	2	2	0	= 6		FM
Jeffer on Medical College	B J Alpers	24	561	18	72	2 092	2	1	0	0	= 3	100-150	PM
Philadelphia General	A Ornsteen J Taeffner	169	1 197	348	51	4 382	2	2	1	0	= 5	128 265	FM
Pittsburgh													
Veterans Administration [341]	E I Youngue	92	279	11	100	9	2	2	1	0	= 5	295-749	O
TEXAS													
Houston													
Baylor Univer ity College of Medicine													
Affiliated Hospital	W S Fields												
Jefferson Davi		7	112	24	45	1 707	1	0	1	0	= 2	125-165	FM
Methodist		1	110			2 122	1	1	0	0	= 2	100 175	FM
Veterans Admini tration		40	545	40	75	17	0	1	1	0	= 2	270-347	PM
VERMONT													
Burlington													
Univer ity of Vermont Affiliated Ho pital	G A Schumacher	5	116	4	100		1	1	1	0	= 3	333 333	O
De Goesbriand Memorial													
Mary Fletcher													
VIRGINIA													
Charlottesville													
University of Virginia	T R Johns	12	347	21	57	3 582	0	2	3	0	= 5	50 50	FM
WASHINGTON													
Seattle													
Univer ity of Washington Affiliated Hospitals	F Plum												
King County Hospital Unit 1 (Harbor View)		17	684±	195	59	1 444	4*	3	3	0	= 10	150-250	FM
Univer ity			32±	1	100	173	2	0	2	0	= 4	180-305	PM
Veterans Administration						170	1	0	0	0	= 1	271	
WISCONSIN													
Madison													
Univer ity Hospitals	F M Forster	25	719	15	100	2 071	4	4	4	0	= 12	100 200	FM
Veterans Administration	B Me ert	23	40	12			1	0	0	0	= 1	271 276	PM

Residency programs in the following hospitals have been approved for TWO years of training by the Council and the Ameri an Board of Psychiatry and Neurology through the Residency Review Committee for Psychiatry and Neurology (Applicants intending to qualify for examination by the American Board of Psychiatry and Neurology Inc should refer to the Board requirements that the candidate have had at least two of the three years of his training in a program or programs approved at the two or three year level)

Hospitals 20 Residencies 42

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths Number	Deaths Autopsy Percent	Outpatient Visits	1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month Min Max	FM Main FM PM O
UNITED STATES ARMY													
CALIFORNIA													
Letterman General San Franci co	W E Porter	41	654	6	83	2 762	1	1	0	0	= 2		
COLORADO													
Fitzsimons General Denver [105]	E W Eberlin	19	181			2 007	1	1	0	0	= 2		
UNITED STATES NAVY													
MARYLAND													
U S Naval Bethe da	J C Hebble	30	227			1 300	1	1	0	0	= 2		
UNITED STATES PUBLIC HEALTH SERVICE													
MARYLAND													
National Institutes of Health-Clinical Center Bethesda	M Shy	63	650	9	100	890	0	0	4	0	= 4		
NONFEDERAL AND VETERANS ADMINISTRATION													
CALIFORNIA													
Long Beach													
Veterans Administration [50]	M Feld	103	236	19	68	1 025	2	1	0	0	= 3	271 462	O
Los Angeles													
Los Angeles County	I Nielson C E Olson	100	4 614	792	35	6 759	1	1	0	0	= 2	273 288	PM
Oakland													
Veterans Administration	J K Smith	58	551	30		111	1	1	0	0	= 2	271 462	
DISTRICT OF COLUMBIA													
Washington													
District of Columbia General	D O Doherty H Stevens						0	0	0	2	= 2	308 308	O
NEW YORK													
Buffalo													
Buffalo General	I Hyman	20	460±	7	33	900	1	1	0	0	= 2	175 200	FP
Edward J Meyer Memorial	B H Smith	26	438	31	52	1 596	2	2	0	0	= 4	292 312	PM
OHIO													
Columbus													
Ohio State Univer ity Hospitals University	M P Sayers D M Palmer	Inc in Int Med				1,366	1	2	0	1	= 4	177 277	PM
OKLAHOMA													
Oklahoma City													
University of Oklahoma Medical Center	S Wolf												
Univer ity Hospitals		Inc in Int Med											
Veterans Administration		35	342	16	69	130							
OREGON													
Portland													
University of Oregon Medical School Ho pitals and Clinics [2 3]	R L Swank	39	435	30	86	1 624	1	1	0	0	= 2	165 215	FM

Numerical and other references are listed on pages 811 through 814

11 NEUROLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM 0
SOUTH CAROLINA													
Charleston													
Teaching Hospitals of the Medical College of South Carolina													
Medical College	R Talbert	8	306	4	50	445	1	1	0	0 =	2	138-168	FM
Roper													
TENNESSEE													
Memphis													
City of Memphis Hospitals	I F Tullis		37	2	50	1,671	0	0	1	0 =	1	150-200	FP
Nashville													
Vanderbilt University	B F Sprofkin	1	40			698	1	1	0	0 =	2	100-125	FM
TEXAS													
Dallas													
Parkland Memorial	S G Ellasson	11	399	89	42	651	1	1	0	0 =	2	150-175	PM
UTAH													
Salt Lake City													
Veterans Administration	I Jarcho	48	136	17	71		2	2	0	0 =	4	271 462	0

Residency programs in the following hospitals have been approved for ONE year of training by the Council and the American Board of Psychiatry and Neurology, through the Residency Review Committee for Psychiatry and Neurology (Applicants intending to qualify for examination by the American Board of Psychiatry and Neurology, Inc, should refer to the Board requirements that the candidate have had at least two of the three years of his training in a program or programs approved at the two or three year level)

Hospitals, 17, Residencies 34

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM 0
UNITED STATES NAVY													
PENNSYLVANIA													
U S Naval Philadelphia	C S Mullin Jr	20	158	1	100	782	1	0	0	0 =	1		
DEPARTMENT OF HEALTH, EDUCATION AND WELFARE													
DISTRICT OF COLUMBIA													
Freedmen's Washington	F Y Williams	6	8	4	50		1	0	0	0 =	1	308-417	PM
NONFEDERAL AND VETERANS ADMINISTRATIONS													
DISTRICT OF COLUMBIA													
WASHINGTON													
George Washington University [131]	H Stevens	8	429	5	80	334	1	1	1	0 =	3	210-285	PM
ILLINOIS													
Chicago													
Cook County	W R Kirschbaum	10	359	185	34	4 169	2	0	0	0 =	2	140 140	FM
KANSAS													
Topeka													
Veterans Administration	D W Hammersley	58	239	6	50		1	0	0	0 =	1	271 345	0
MASSACHUSETTS													
Boston													
Children's Medical Center													
Lemuel Shattuck [1]	W H Timberlake	75	276	11	50	749	3	0	0	0 =	3	262 262	PM
Massachusetts Memorial Hospitals	C A Kane					797	0	0	1	0 =	1	175 245	0
NEBRASKA													
Omaha													
Veterans Administration	F A Majka	35	394	39	64	37	1	1	0	0 =	2	270-293	0
NEW YORK													
New York City													
Fordham	J H Friedman	10	128	3	67	728	1	0	0	0 =	1	145 195	
Goldwater Memorial													
New York University—Division III	J S Freiman	87	130	16	50		3	0	0	0 =	3		
Lenox Hill													
New York Medical College Metropolitan Medical Center													
Metropolitan	I M Tarlov	16	261	9		1 413	3	0	0	0 =	3	145 195	FM
Veterans Administration (Manhattan)	R I Silver	36	144	20	65	185	0	1	0	0 =	1	271 348	0
PENNSYLVANIA													
Coatesville													
Veterans Administration	J F Kurtzke	80	270	30	80	140	3	0	0	0 =	3	270-347	0
Philadelphia													
Graduate *Hospital of the University of* Pennsylvania	A Tornay	14	297	14	43	1 647	1	1	1	0 =	3	75-100	FM
Pennsylvania	F A Elliott					574	2	0	0	0 =	2		
VIRGINIA													
Richmond													
Veterans Administration	A Davis	55	283	16	81	831	2	0	0	0 =	2	271-412	PM

12 OBSTETRICS AND GYNECOLOGY

Residency programs in the following hospitals have been approved by the Council, the American Board of Obstetrics and Gynecology and the American College of Surgeons, through the Residency Review Committee for Obstetrics and Gynecology, as offering acceptable training in the specialty Certain programs listed as approved for three years require that the resident serve a longer period in order to obtain 18 months' training in obstetrics and 18 months training in gynecology

Hospitals, 473, Residencies, 2,654

	Chief of Service or Program Director	Residencies Approved	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Years	Stipend per Month: Min Max	Main Maintenance FM PM 0	Length of Residency Program (Years)
UNITED STATES AIR FORCE															
TEXAS															
U S Air Force San Antonio	C E Gibbs	OBG	34	2 955#	3	100	29 654	2	2	2	0 =	6			3

Numerical and other references are listed on pages 811 through 814

12 OBSTETRICS AND GYNECOLOGY—Continued

	Chief of Service or Program Director	Residencies Approved	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Years	Stipend per Month: Min Max	PM Main O Maintenance	Length of Approved Program (Years)
UNITED STATES ARMY															
CALIFORNIA															
Letterman General San Francisco	H M Jesurun	OBG	43	2 702	11	100	24 958	2	2	2	0	= 6			3
COLORADO															
Fitz Simons General Denver [109]	J S Zelenik	OBG	40	2 581	4	100	20 895	2	2	2	0	= 6			3
DISTRICT OF COLUMBIA															
Walter Reed General Washington	H L Riva	OBG	54	2 545	27	89	36 674	3	3	3	0	= 9			3
HAWAII															
Tripler Army Honolulu	E A Zimmermann	OBG	64	5 627	1	100	49 871	2	2	2	0	= 6			3
TEXAS															
William Beaumont General El Paso	A K Schoenbucher	OBG	50	4 384	4	100	39 709	3	3	3	0	= 9	394 565	PM	3
Brooke General San Antonio	W I Pickhardt	OBG	40	2 699	3	67	29 949	2	2	2	0	= 6			3
WASHINGTON															
Madigan General Tacoma	H E Harrison	OBG	44	3 843			38 200	2	2	2	0	= 6			3
UNITED STATES NAVY															
CALIFORNIA															
U S Naval Oakland	R W Tandy Sr	OBG	37	2 868	6	89	29 287	2	2	2	0	= 6			3
U S Naval San Diego	W S Baker Jr	OBG	68	4 744	12	75	36 587	2	2	3	0	= 7			3
ILLINOIS															
U S Naval Great Lakes	B L Hawks	OBG	35	1 736			19 392	1	1	1	0	= 3			3
MARYLAND															
U S Naval Bethesda	T B Lebherz	OBG	49	2 713	5	100	11 533	2	2	3	0	= 7			3
MASSACHUSETTS															
U S Naval Chelsea	D M Shook	OBG	34	1 801	2	50	11 946	1	2	1	0	= 4			3
NEW YORK															
U S Naval New York City (St Albans)	J W Huston	OBG	30	2 162	9	88	15 406	1	1	1	0	= 3			3
PENNSYLVANIA															
U S Naval Philadelphia	H J Hunter	OBG	30	1 993	2	100	18 013	1	1	1	0	= 3			3
VIRGINIA															
U S Naval Portsmouth	D A Callagan	OBG	85	5 934	5	80	40 814	3	3	2	0	= 8			3
UNITED STATES PUBLIC HEALTH SERVICE															
LOUISIANA															
U S Public Health Service New Orleans	J B Collins	OBG	13	706			6 883	1	1	1	0	= 3			3
DEPARTMENT OF HEALTH EDUCATION AND WELFARE															
DISTRICT OF COLUMBIA															
Freedman's Washington [125]	J F Clark	OBG	64	5 133	16	38	5 749	1	2	2	2	= 7	308-417	PM	3
OTHER FEDERAL															
CANAL ZONE															
Ancon															
Gorgas Balboa Heights	I J Strumpf	OBG	40	2 325	8	88	14 117	1	1	1	0	= 3	458 593	O	3
NON FEDERAL AND VETERANS ADMINISTRATION															
ALABAMA															
Birmingham															
University of Alabama Medical Center		OBG													3
Carraway Methodist	T M Boulware		26	2 467	1	100		1	1	0	0	= 2	250-300	FM	
University Hospital and Hillman Clinic	W N Jones		65	5 700	6	50	10 102	4	4	3	0	= 11	130 154	FM	
Mobile General (Mobile)															
Fairfield															
Lloyd Noland	O T West	OBG	31	1 690	3	33	20 968	1	1	1	0	= 3	250-375	FM	3
ARIZONA															
Phoenix															
Good Samaritan	J B Smith	OBG	70	17	4	75	1 475	3	0	0	0	= 3	350 350	PM	1
Maricopa County General	F Sattenspiel	OBG	21	2 151			1 736	2	2	1	0	= 5	373-412	PM	3
St Joseph's	R Jennett	OBG	59	7 340	4	75	1 794	1	1	1	0	= 3	250-350	FP	3
ARKANSAS															
Little Rock															
University	W E Brown	OBG	64	4 305	23	19	18 125	3	3	2	2	= 10	170 237	O	3
CALIFORNIA															
Bakersfield															
Kern County General	L E Smale	OBG	36	2 627	12	86	15 970	2	2	2	0	= 6	350-425	O	2
Berkeley															
Herrick Memorial	D Minkler	OBG	21	2 315	3	67	2 460	1	0	0	0	= 1	300 350	FP	1
Fresno															
General Hospital of Fresno County	H L Tieche	OBG	35	3 310	7	71	9 522	2	1	1	0	= 4	300-325	PM	3
Glendale															
Glendale Sanitarium and Hospital	J B Brown	OBG	33	2 890	2	50	3 576	1	1	0	0	= 2	325-350	PM	2
Long Beach															
Memorial Hospital of Long Beach	P B Hartley	OBG	39	3 808			2 137	1	0	0	0	= 1	325-425	PM	3

Numerical and other references are listed on pages 811 through 814

12 OBSTETRICS AND GYNECOLOGY—Continued

	Chief of Service or Program Director	Residencies Approved	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Years	Stipend per Month: Min Max	Main Teaching Hospital Fro Program Director	Length of Residency (Years)
CALIFORNIA—Continued															
Los Angeles															
California	K P Russell	OBG	41	3,916	2		9,644	2	2	2	0	= 6	225-275	FP	3
Santa Monica (Santa Monica)															
Cedars of Lebanon [82]	I Krohn G Rosenblum	OBG	45	4,330			4 211	2	2	1	0	= 5	260-400	FM	3
Hospital of the Good Samaritan	W R Schumann	OBG	43	3 032	4	25	1 095	2	0	0	0	= 2	325 375	FM	3
Kaiser Foundation	T H Baker	OBG	59	5 765	5	60	56 814	3	3	3	0	= 9	275 325	PM	3
Los Angeles County [83]	I Henricksen, F Nichols	OBG	213	22,218	84	44	17 342	5	5	5	5	= 20	273 319	PM	3
Hollywood Presbyterian–Olmstead Memorial	F I Krahulik	OBG	18	1,801			2 289	1	0	0	0	= 1	270 270	PM	3
Queen of Angels	C V Von Der Ahe	OBG	51	5 195	5	40	6 027	2	2	2	0	= 6	275-375	FM	3
University of California	D G Morton	OBG	31	2 419	12	75	9 942	2	2	2	2	= 8	240 426	FPO	3
White Memorial [57-87]	F I Nichols	OBG	33	3 146	7	86	17 808	2	3	3	0	= 8	215 235	PM	3
Oakland															
Highland Alameda County [85]	G F Calvin	OBG	35	4 029	8	25	11 204	2	2	2	0	= 6	200 295	FM	3
Kaiser Foundation	R W King	OBG	49	5 084	6	83		3	3	2	0	= 8	315-340	FM	3
Orange															
Orange County General	R Hayden	OBG	9				7 617	1	1	1	0	= 3	350 395	0	3
Palo Alto															
Stanford Medical Center and Affiliated Hospitals		OBG													3
Palo Alto-Stanford Hospital Center	C E McLennan		2	158			2 288	4	4	2	1	= 11	250 325	0	
Community Hospital of San Mateo County (San Mateo)	N D Morrison Jr						4 768								
San Diego															
Mercy	J R Phalen	OBG	67	7 363	4	75	7 902	2	2	2	0	= 6	225 325	FP	3
San Diego County General	J V Rust	OBG	18	1 490	9	25	3 879	1	1	0	0	= 2	250 300	FM	3
San Francisco															
Children's	D V Dallas	OBG	25	3 134	5	40	3 873	1	1	1	0	= 3	250 300	FP	3
Kaiser Foundation	H B Nelson	OBG	16	4 195	7	57	36 228	2	2	2	0	= 6	315 415	FP	3
Mount Zion	H V Jurow	OBG		2,122#	1		2 079	1*	1	1	0	= 3	150 250	FM	3
Presbyterian Medical Center	C F Fluhmann	OBG	13	887	2	100	8 984	2	2	1	0	= 5	100-175	PM	3
St Francis Memorial	C D Hart	OBG	32	2 074			1 031	3	0	0	0	= 3	400 400	PM	1
St Luke's	J R Upton	OBG	31	2,231			4,111	1	1	0	0	= 2	325 350	FP	3
San Francisco Catholic Hospitals		OBG													3
Mary's Help	H Schwarz		31	2,467#	1		5 567	2	1	1	0	= 4	225-375		
St Elizabeth's Infant			23	1 617			539	2	0	0	0	= 2	250 400	FM	
St Joseph's	H Von Geldern		18	2 938	2	100	2 508	4	4	2	0	= 10	200 300	FP	
St Mary's	G P O'Hara						2 936	1	1	1	0	= 3	220 360	0	1
San Francisco General	F C Hill	OBG	71	4,776	13	69									
University of California Hospitals [68]	J W Page	OBG	47	2 757	8	75	18 920	4	1	3	1	= 9	243 326		3
San Jose															
Santa Clara County	J P Fox	OBG	30	1,826	12	80	9 383	2	2	0	0	= 4	270 320	PM	3
San Mateo															
Community Hospital	See Stanford Medical Center, Palo Alto														
Santa Monica															
St John's	B H Watson	OBG	55	5 461	3	67		2	0	0	0	= 2	225 250	PM	3
Santa Monica Hospital	See California Hospital Los Angeles														
Stockton															
San Joaquin General	D Harrington	OBG	28	2 201	1		11 234	2	1	1	0	= 4	275 340	PM	3
Torrance															
Harbor General's	N Assali J V Kelly	OBG	41	3 484#	14	43	5 812	2	2	2	2	= 8	273 319	FM	3
COLORADO															
Denver															
Presbyterian	M C Waddell	OBG	44	3 145	10	67	3 380	3	0	0	0	= 3	275 300	PM	3
St Joseph's	F B McGlone	OBG	5	4 060	1	1		1	1	1	0	= 3	200 250	FM	3
University of Colorado Medical Center		OBG													3
Colorado General [57]	F S Taylor		31	2 467	7	71	12 149	2	2	2	2	= 8	180 205	0	
Denver General	N P Isbell		34	2 510#											
CONNECTICUT															
Bridgeport															
Bridgeport	C Griswold	OB	42	3 649	1	100	3 151	2	0	0	0	= 2	240	FM	1
St Vincent's	F Kinder	OB	43	3 675	3	67	1 453	2	0	0	0	= 2	300 325	PM	1
Hartford															
Hartford	J F Middlebrook	OBG	90	9 879	4	100	4 058	1	1	1	0	= 3	125-275	FP	3
St Francis [110]	T F McNulty	OBG	77	5,174	17	30	4 639	1	1	1	0	= 3	175 250	FP	3
New Britain															
New Britain General	D A Bristoll	OBG	25	4,506	1		1 147	1	1	1	0	= 3	250 325	FM	3
New Haven															
Yale-New Haven Medical Center		OBG	103	7,608	16	75	13,770	4	4	4	1	= 13	250 350	FM	3
Grace-New Haven Community	C L Buxton	OBG	50	3 646	2		3 507	2	2	1	0	= 5	300 350	PM	3
Hospital of St Raphael	A J Connolly														
New London															
Lawrence and Memorial	W J Morse	OBG	41	3,097	7	6	53	3*	0	0	0	= 3	250 300	FP	1
Norwalk															
Norwalk	E F Longworth	OBG	25	3,183	2	50	1 327	2	0	0	0	= 2	195-300	FP	1

Numerical and other references are listed on pages 811 through 814

12 OBSTETRICS AND GYNECOLOGY—Continued

	Chief of Service or Program Director	Residencies Approved	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy percent	Outpatient visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Years	Stipend per Month: Min Max	Main tenance	Length of Approved Program (Years)
DELAWARE															
Wilmington															
Delaware	C I Hudlburg	OBG	63	4 608#	9	56	2 204	1	1	1	0	= 3	220-260	FP	3
Wilmington General	M Keyser	OBG	35	3 395			4 736	1	2	0	0	= 3	260-295	FM	2
DISTRICT OF COLUMBIA															
Washington															
Columbia Hospital for Women and Lying in Asylum	H J R McNitt, C H Hixson	OBG	72	7 425	3	33	13 401	3	3	3	0	= 9	150 200	FM	3
District of Columbia General	A Marchetti R Barter	OBG	96	8 727	18	22	22 156	4	4	2	0	= 10	233 283	O	3
Doctors	J K Cromer	OBG	48	3 185	7	71		2	1	0	0	= 3	200-250	FM	2
Georgetown University	A A Marchetti	OBG	62	4 776	3	33	7 529	3	3	3	0	= 9	175-270	FM	3
George Washington University	R H Barter	OBG	112	6 675	20	75	2 435	2	1	2	0	= 5	210-260	PM	3
Providence [1]	C J Ellis	OBG	75	6 028	1	100	3 738	1	1	1	1	= 4	350-425	PM	3
Sibley Memorial	M Kaufman	OBG	37	2 904	2	100	780	1	2	0	0	= 3	200-400	FM	2
Washington Hospital Center	S M Dodek J K Cromer	OBG	92	6 748	13	38	11 476	2	2	2	2	= 8	215-260	FP	3
FLORIDA															
Gainesville															
University of Florida Teaching Hospital and Clinics	H Pizzotti	OBG	8	377	1	100		2	2	2	2	= 8	217 450		3
Jacksonville															
Baptist Memorial		OBG													3
Duval Medical Center	R W McDowell	OBG	30	3 139	4	50	13 075	2	2	1	0	= 5	200-250	FM	3
St Luke's	R W McDowell	OBG	39	3 785	3	66	10 000	2	1	1	0	= 4	350-375	PM	3
St Vincent's	J A Allgood	OBG	62	4 992#	4	75	1 779	2	1	1	0	= 4	325-375	PM	3
Miami															
Jackson Memorial	J H Ferguson	OBG	68	9 450	22	59	10 658	9	5	4	1	= 19	200 335	PM	3
Miami Beach															
Mount Sinai Hospital of Greater Miami	H Kraft	OBG	32	2 440	6	50	3 264	0	2	0	0	= 2	250 300	FM	2
St Francis	J Heffernan	OBG	27	2 031#			1 004	1	0	0	0	= 1		FM	1
Orlando															
Orange Memorial	J P Michael R I Tolle	OBG	75	5 354	19	47		1	1	1	1	= 4	325 400	O	3
St Petersburg															
Mound Park [2]	F W Bachulk	OBG	25	2 654	4	50		1	0	0	0	= 1	307 307	PM	1
Tampa															
Tampa General	J Ingram	OBG		6 122	52	30	2 200	2	2	2	0	= 6	250 300	FM	3
GEORGIA															
Atlanta															
Crawford W Long Memorial	R K Hancock	OBG	96	7 922	7	43	4 963	6	2	2	0	= 10	285 300	O	3
Georgia Baptist	F D Colvin	OBG	74	6 437	6	17	3 953	2	2	2	0	= 6	330 380	PM	3
Grady Memorial	J B Cross	OBG	87	8 981	17	50	40 231	5	5	5	0	= 15	100 200	FM	3
Piedmont	C B Upshaw	OBG	41	3 634			1 714	1	1	1	0	= 3	290 320	PM	3
St Joseph's Infirmary	W V Skiles	OBG	42	2 864	3	66	4 803	1	1	1	0	= 3	270-295	PM	3
Augusta															
Medical College of Georgia Hospital	C J Bryans	OBG						3	3	4	0	= 10			3
Eugene Talmadge Memorial	J Bryans		28	803	5	40	2 173						250 500	O	
University	W G Watson		48	4 496	2	50	4 973						200 250	O	
Macon (Macon)	F Rogers E Swilling			5 325	6		2 479						275-325	FM	
Savannah															
Memorial Hospital of Chatham County	J S Bodziner	OBG	28	2 460	2	100	3 828	1	1	1	0	= 3	350	FM	3
HAWAII															
Honolulu															
Kapiolani Maternity and Gynecological St Francis	H J Lambert Jr, E Matsuoka	OBG	105	9 674	4	25	5 414	3	3	3	0	= 9	150 300	FM	3
Queen's	R Sakimoto	OBG	47	4 029	3	60	2 250	2	2	0	0	= 4	225 250	FM	2
ILLINOIS															
Chicago															
Augustana	R G Barrick	OB	16	1 033				3	0	0	0	= 3	200-200	FM	1
Cook County	A Webster A E Kanter	OBG	455	48 826	290	78	28 351	11	6	6	0	= 23	140 140	FM	3
Englewood	T R Cunningham	OB	21	1 907				1	0	0	0	= 1	200-200	FM	1
Grant	J P Fitz Gibbons	OBG	36	2 546	2	50	1 858	1	1	0	0	= 2	225 250		2
Hospital of St Anthony De Padua	J Donlon	OB	20	1 777			750	2	0	0	0	= 2	250-250	FM	1
Illinois Masonic	F J Roos	OBG	82	5 452	6	50	3 077	4	0	0	0	= 4	175 235	FM	1
Lewis Memorial Maternity	J Towne	OBG	70	5 957	18	55	28 514	4	4	4	0	= 12	200 250	FM	3
Lutheran Deaconess	A D Green	OB	18	1 547				1	0	0	0	= 1	200-200	FM	1
Mercy [1 3]	H E Schmitz	OBG	35	2 623	18	39	3 312	0	1	1	1	= 3	150	FM	3
Michael Reese [7]	J W Frankenthal	OBG	84	5 058			9 613	3	3	2	2	= 10	125-200	FP	3
Mount Sinai	A E Kanter	OBG	48	3 147	5	80	4 285	2	2	2	0	= 6	225-275	PM	3
Northwestern University Medical Center		OBG													3
Chicago Wesley Memorial [7]	G Gardner	OBG	55	3 259	10	30	3 258	2	2	2	1	= 7	125 200	FM	3
Chicago Maternity Center	H B Benaron B E Tucker							0	4	0	0	= 4	150-150	FM	
Passavant Memorial	J I Brewer	OBG	41	2 849	9	67						= 5	225-275	PM	3
Evanston (Evanston)	D N Danforth	OBG	48	3 443	1	100	1 521	1	1	1	0	= 3	225 250	PM	3
Presbyterian St Luke's	H Boyden	OBG	51	3 970	3		9 545	3	3	3	0	= 9	125-175	FM	3
Provident	R C Stepto	OBG	44	3 441	7	57	2 654	2	1	1	0	= 4	200-200	FM	3
St Anne's	R J Hawkins	OB	57	5 434	10	60	515	7	0	0	0	= 7	250-275	FP	1
St Elizabeth's	L G Scheffel	OBG	48	3 741	4	75	1 002	1	1	1	0	= 3	200-200	FM	2
St Joseph	C T Geiger	OBG	30	2 038	1		1,386	1	1	1	0	= 3	300-350	FM	3
University of Chicago Clinics Billings	M E Davis	OBG	101	4 953	8	63	26,501	9	7	3	1	= 20	225 305	PMO	4
Chicago Lying-in															
University of Illinois Research and Educational Hospitals	W F Mengert	OBG	56	3 725	12	75	21 126	3	3	3	0	= 9	160-215	PM	3

Numerical and other references are listed on pages 811 through 814

12 OBSTETRICS AND GYNECOLOGY—Continued

	Chief of Service or Program Director	Residencies Approved	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Years	Stipend per Month: Min Max	Maintenance	Length of Approved Program (Years)
ILLINOIS—Continued															
Evanston															
Evanston Hospital	See Northwestern University, Chicago														
St Francis	J V Bremner	OBG	64	4 545	6	66	2 399	1	1	1	0	= 3	260 280	FM	3
Evergreen Park															
Little Company of Mary	W Carlisle P Lawler Sr	OBG	80	7 109	5	20	1,50	4	1	1	0	= 6	225 275	FM	3
Oak Park															
West Suburban	F H Falls	OBG	71	4 247			339	2	2	2	2	= 8	225 300	FM	3
Peoria															
St Francis	W V Michael	OBG	63	4 802	11	46	1,643	1	1	0	0	= 2	225 250	FM	2
Rockford															
St Anthony	G T Burns	OBG	21	1,650				1	0	0	0	= 1	200 300	FM	1
INDIANA															
Indianapolis															
Indiana University Medical Center		OBG													3
Indiana University															
Medical Center Hospitals	C P Huber		85	3,740	11	54	8 958	4	4	4	4	= 16	225 300	PM	
Marion County General	C Gillespie		49	4,140	16	50	20 310	2	2	2	2	= 8	269 348	PM	
Methodist	L I Clark	OBG	65	7 515	15	53	4 049	2	2	2	0	= 6	290 350	PM	3
St Vincent's	P F Muller	OBG	39	3 491			1,287	1	1	1	0	= 3	275 425	PM	3
Lafayette															
St Elizabeth	M L Harden	OBG	40	2 739#			312	1	1	0	0	= 2	275-350	FM	2
IOWA															
Iowa City															
State University of Iowa Hospitals	W C Keettel	OBG	95	3 018	18	61	16,521	4	4	4	0	= 12	200-255	FM	3
KANSAS															
Kansas City															
University of Kansas Medical Center	K Krantz	OBG	51	3 005	11	81	15 265	4	4	4	0	= 12	125-175	PM	3
Wichita															
St Francis	L E Woodard	OBG	68	5 373	1	100	2 326	3	0	0	0	= 3	275 275	FP	1
Wesley	J S Menaker	OBG	67	5,150				1	0	0	0	= 1	295-375	FM	1
KENTUCKY															
Lexington															
St Joseph	J B Stith	OBG	11	996			828	1	1	1	0	= 3	220-240	FP	3
Central Baptist	D M Royalty		21	2 152			1 051	0	1	0	0	= 1	350-400	FM	
Good Samaritan	J I Keyes		28	1,937	1	100		0	0	1	0	= 1	220 240	FM	
Louisville															
Louisville General	D M Haynes	OBG	41	4 170	10	10	20 176	0	3	3	3	= 9	141 200	FM	3
St Joseph Infirmary	H Graves	OBG	60	4,765	5	40	2 182	1	1	1	1	= 4	220-260	PM	3
LOUISIANA															
New Orleans															
Charity Hospital of Louisiana	M Schwarzenbach	OBG	72	4 904	16	56	22 598	5	4	2	0	= 11	125-175	FM	3
Independent Unit	A Mickal	OBG	115	7 989	21	62	41 504	6	6	6	0	= 18	125 175	FM	3
Louisiana State University Unit	C G Collins	OBG	106	6 417	27	63	32 582	6	6	6	0	= 18	125 175	FM	3
Tulane University Unit	C Ivrone	OBG	25	1,794			14 617	2	2	2	0	= 6	225-275	PM	3
Ochsner Foundation [18]	F S Oser, Jr	OBG	58	5 318	2	50		2	2	2	0	= 6	225-275	PM	3
Southern Baptist	H Meyer G Johnson	OBG		4 334	3	33	6 156	2	2	2	0	= 6	125-175	FP	3
Touro Infirmary															
Shreveport															
Confederate Memorial Medical Center	F E Dilworth	OBG	72	6 716	8	35	17 322	3	3	3	0	= 9	125-200	FM	3
MARYLAND															
Baltimore															
Baltimore City Hospitals	P L Molumphy	OBG	88	7 138	11	100	7 685	6	6	4	2	= 18	150 250	FP	3
Bon Secours	H B McNally C B Marek	OBG	49	3 225			3 302	2	1	1	0	= 4	260 300	FM	3
Church Home and Hospital	J King B E Seegar Jr	OB	4	1,178#			2 885	0	1	1	0	= 2	200 300	FP	1
Franklin Square [180]	I A Siegel	OBG	31	2 331#				2	1	1	1	= 5†	225-250	FM	3
Hospital for Women [18]	J F Savage D Woodruff	OBG		7 343	18	30	13 172	4	3	3	3	= 13†	220 220	FM	3
Johns Hopkins	N J Eastman R W Lefmde	OBG	111	6 806#	34	53	42 325	11	5	6	3	= 25	160 276	PM	3
	W K Diehl	OBG	47	3 651	4	75	6 506	4	2	2	0	= 8	220 250	FM	3
Lutheran	I Kandash D M Dixon	OBG	76	3 754	4	50	1 695	2	2	2	0	= 6	225 275	FM	3
Maryland General	W A Dodd F K Morris	OBG	53	3 917	12	33	4 802	2	2	1	0	= 5	275 275	PM	3
Mercy	H B McNally J C Dumler	OBG	40	3 141#			1 771	3*	2	1	0	= 6	275 300	FM	3
St Agnes	J B Boyle	OBG	29	2 297	5	60	2 995	2	1	1	0	= 4	225-250	FM	3
St Joseph's	I A Siegel A Sondheimer	OBG	60	5 549	6	50	11 473	4	3	2	2	= 11	130 300	FM	3
Sinai	F Morris	OB	11	1 127			2 061	2	2	1	0	= 5	200-225	FP	1
South Baltimore General	J M Haws	OBG	32	2 623	2		6 133	4	1	1	0	= 6	215-250	FM	3
Union Memorial	A I Haskins	OBG	62	4 799	11	64	27 180	6	4	4	1	= 15	200-250	PM	3
University															
Cheverly															
Prince George's General	J F Warren	OBG	45	3 334	2	50	4 177	2	2	2	0	= 6	200 300	FM	3
MASSACHUSETTS															
Boston															
Beth Israel	H H Rosenfield	OB	44	2 922			4 511	2	2	0	0	= 4	167 250	O	2
Boston City	B Tenney Jr	OBG	87	5 863	9	56	23 074	6	4	4	0	= 14	158 248	FM	3
Boston [illegible] Free Hospital for Wom[illegible]	D E Reid G V Smith	OBG	192	11,104	37	62	33 845	4	4	4	0	= 12	100-175	FM	3
Carney [illegible]	R I Heffernan, J Meehan	OBG	96	7 058	5	40	7,043	6	6	6	0	= 18	175-225	FP	3
[illegible] Hospitals	D I McSweeney	OBG	30	1 819	9	67	4 528	2	2	2	0	= 6	175-275	O	3
Massachusetts [illegible]	L Parsons	GYN	8	407	6	17	2 135	1	1	0	0	= 2	237 304	O	[illegible]
New [illegible]	G W Mitchell Jr	OBG	21	1 397			5 216	3	0	0	0	= 3	225-325	FM	3
New Eng[illegible]	H	OBG	76	5 395	2		3 844	2	2	2	0	= 6	175-225	FM	3
St Eliz[illegible]	R														

Numerica[illegible] are listed through 814

12 OBSTETRICS AND GYNECOLOGY—Continued

	Chief of Service or Program Director	Residencies Approved	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy percent	Outpatient visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Years	Stipend per Month: Min Max	Per Maintenance FM PM O	Length of Approved Program (Years)
MASSACHUSETTS—Continued															
Cambridge															
Cambridge City	P P McGovern	OBG	33	2 197	1	100	3 777	1	1	1	0 =	3	170-220	FM	3
Springfield															
Wesson Maternity	P M Ashton	OB	79	5 499	4		3,392	1	1	0	0 =	2	250-250	FM	2
MICHIGAN															
Ann Arbor															
St Joseph Mercy	W Belcher	OBG	54	3 387	3	33	3 088	1	1	1	0 =	3	310-385	FM	3
University	N F Miller	OBG	83	4,329	54	77	19 019	3	3	3	3 =	12	180-275	O	3
Dearborn															
Oakwood	A T Lebamoff	OBG	47	4,998	2	100	362	1	1	0	0 =	2	250-325	FM	3
Detroit															
Crittenton General	H. G Gaston	OBG	68	4 037	4	50	4 451	2	2	2	0 =	6	400-475	O	3
Detroit Memorial	R Walkowiak	OBG	32	2 276	1	100		1	1	1	1 =	4	425-500		3
Evangelical Deaconess	A R Hunnel	OBG		1,988			48	2	0	0	0 =	2	317 317	PM	1
Grace	L E Bauer	OBG	100	9 580	8	38	2 644	4	4	4	0 =	12	275-350	FP	3
Harper	H C Mack	OBG	82	4 602#	9	77	3 672	3	2	2	0 =	7	275-325	PM	3
Henry Ford	C P Hodgkinson	OBG	85	3,215	10	70	39 058	3	3	3	3 =	12	265 365	PM	3
Mount Carmel Mercy	J W Pichette	OBG	116	8 660#	7	50	838	4	3	4	0 =	11	450-525	PM	3
Providence	E B Foster	OBG	79	4 975	7	85	3 921	2	2	2	0 =	6	410-450	PM	3
St John	J Clifford	OBG	69	6,217	1		583	2	2	0	0 =	4	325-400	FM	2
St. Joseph Mercy	R Walkowiak	OBG	33	2,316	2		840	1	1	1	0 =	3	410-430	FM	3
Sinai	E D Rothman	OBG	54	3 696			2 696	2	2	2	0 =	6	300-350	FM	3
Wayne University Affiliated Hospital		OBG													3
Herman Kiefer	C S Stevenson		60	6 440	1		30 616	3	3	3	0 =	9	325-400		
Receiving	C Stevenson		48	1,862	17	35	9 318	0	0	0	2 =	2	325-400	PM	
Woman's	A Seski H Nelson	OBG	101	6,584	12	67	3 410	2	2	2	2 =	8	475-550	O	3
Flint															
Hurley	J I Collins	OBG	77	4 880#	12	67	946	2	2	2	0 =	6	325-425	FM	3
Grand Rapids															
Blodgett Memorial	C M Bell	OBG	59	3 997	5	80	697	1	0	0	0 =	1	325-325	FM	3
Butterworth	R J Pualman	OBG	42	3 482#	72	39	1 665	2	2	2	0 =	6	300-350	PM	3
St Mary's	C F Webb	OBG	61	4 463	5	80	2 090	3	1	0	0 =	4	370-350	FP	3
Highland Park															
Highland Park General	R Siddall	OBG	47	3 009#	2	50	931	1	1	1	0 =	3	325 375	FM	3
Kalamazoo															
Borgess	J W Kavanaugh	OBG	34	2 777	1	100	440	0	1	1	1 =	3	275-300	FP	1
Pontiac															
Pontiac General	H A Furlong	OBG	52	4 194	1	100	1 034	2	2	2	0 =	6	350-450	FP	3
St Joseph Mercy	R Adair	OBG	82	5 668	3	100	1 583	2	2	2	0 =	6	375-435	PM	3
Royal Oak															
William Beaumont	H W Longyear	OBG	49	4,503	2	100	19	2	2	2	0 =	6	300-400	PM	3
Saginaw															
Saginaw General	M J Albers	OBG	45	2,349	7	71	625	1	1	1	0 =	3	365-415	PM	3
MINNESOTA															
Minneapolis															
Minneapolis General	M F Mitchell	OBG	25	1 663			8 689	1	1	1	0 =	3	235-235	FM	3
Northwestern	M Rothnem	OBG	88	3,211	2	100	256	2	0	0	0 =	2	225-225	FP	1
St Barnabas	I J Hay	OBG	43	3 768				2	0	0	0 =	2	200-250	FM	1
St Mary's	J Hamel	OBG	31	6 265	4	50	2 031	2	2	0	0 =	4	250-250	FM	3
Swedish	G Janda	OBG						2	0	0	0 =	2	200-300	FM	1
University of Minnesota Hospitals	J I Mckelvey	OBG	17	2 035	20	90	7,948	5	2	4	1 =	12	244 244		3
Rochester															
Mayo Foundation	R B Wilson	OBG		4,368	7	86		5	5	5	5 =	20	200-333	PM	3
Saint Paul															
Ancker	E Kasper	OBG	18	1 221	3	100	5 986	1	0	0	0 =	1	235-235	FM	1
Charles F Miller	J F Hodgson	OBG	52	3 487#			4,833	0	1	0	0 =	1	350-350	PM	1
St. Joseph's	J Melancon	OBG	48	3 765	2	50	155	0	0	2	0 =	2	355-355	PM	3
MISSISSIPPI															
Jackson															
University of Mississippi Medical Center University	M Newton	OBG						3	2	2	0 =	7	250-325	O	3
MISSOURI															
Clayton															
St Louis County	E L Dorsett	OBG	26	1 108	2		6 063	1	1	1	0 =	3	250-350	FM	3
Columbia															
University of Missouri Medical Center	J S Roden	OBG	24	567	5	100	5 669	2	2	2	0 =	6	200 300		3
Kansas City															
Kansas City General	R G Helman	OBG	66	4 421	19	53	16 990	3	3	3	0 =	9	220-265	PM	3
St Joseph	A B Sinclair	OBG		3 233	5	80	1 500	1	1	0	0 =	2	250-300	FM	1
St Luke's	K E Cox	OBG	49	3 951	3	33	665	2	1	1	0 =	4	250-300	FP	3
St Louis															
Barnes	W Allen	OBG	161	5 090	7	57	21,529	6	4	4	4 =	18	250-175	FM	3
De Paul	E G Hamilton	OBG	61	4,397	7	43		1	1	0	0 =	2	200-225	FM	2
Homer G Phillips	S Monat	OBG					4,57	4	3	3	3 =	13	235-314		3
Jewish	D Rothman	OBG	61	3 900#			2 787	2	1	1	1 =	5	300-300	FM	3
St John's	M Weis	OBG	62	3 739			2 195	2	2	2	0 =	6	250 350	FP	3
St Louis City	A E Slinger L Hartnett	OBG	71	4 706	10	60	12 631	4	4	4	0 =	12	234 314	PM	3
St Luke's	G J L Wulff Jr	OBG	57	2,828#	5	60	3 075	1	1	1	0 =	3	250-350	FM	3
St Mary's Group of Hospitals of St Louis University	J A Hardy Jr	OBG	134	8 903	3	75	10 646	5	3	3	0 =	11	150-170	FM	3

Numerical and other references are listed on pages 811 through 814

12 OBSTETRICS AND GYNECOLOGY—Continued

	Chief of Service or Program Director	Residencies Approved	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Years	Stipend per Month: Min Max	Main Affiliation FM PM O	Length of Approved Residency (Years)
NEBRASKA															
Omaha															
Creighton University Medical Center															
Creighton Memorial-St Joseph	M F Grier	OBG	55	3,917	3			2	2	1	0 = 5		210 260	FP	3
St Catherine's															
University of Nebraska Hospital	R G Holly	OBG	24	1,235	6	67	6,478	2	2	2	0 = 6		225 300	PM	3
Lincoln General (Lincoln)	H S Morgan		27	1,609	1	100		1	0	0	0 = 1		350 350	FM	
Immanuel	L S McGoogan		21	504	2								175-175	FM	
NEW JERSEY															
Camden															
Cooper	G B German, H P Shipps	OBG	57	5 357	5	20	10,505	2	2	2	0 = 6		200 250	FM	3
Hackensack															
Hackensack	R C Schretzmann	OB	39	3 087	1	100	1 333	2	0	0	0 = 2		150 200	FM	1
Jersey City															
Jersey City Medical Center	E N Bookrajian	GYN	31	1 211	21	29	2 948	2	2	1	0 = 5		108 200	FM	3
Margaret Hague Maternity	J P Donnelly	OB	173	12 059	78	14	27,461	10	4	0	0 = 14		133-216	FM	3
Long Branch															
Monmouth Medical Center	W Shanik	OB	39	2,738			947	1	0	0	0 = 1		200-200	FM	1
Mount Holly															
Burlington County	R H Van Meter	OBG	36	2,493			3 037	1	1	1	0 = 3		100 300	FM	3
Neptune															
Fitkin Memorial	R A Mackenzie	OBG	39	2,905	3	33	1 716	1	0	0	0 = 1		250 250	FM	3
Newark															
Martland Medical Center	J Pannullo A Godfrey	OBG	70	4 488	19	31		3	4	2	0 = 9		160 212	FM	3
Newark Beth Israel	L Savel	OBG	193	9 839	72	73	5 101	1	1	1	0 = 3		125 175	FM	3
St Michael's	G W Hayes O Glass	OBG	54	3 860	4	75	2,054	1	2	1	0 = 4		150 215	FM	3
Passaic															
Passaic General [30]	C Rasin	OBG	39	2 841	1	100	675	2	0	0	0 = 2		250 350	FM	1
Paterson															
Paterson General	L E Thron P Rauschenbach	OBG	28	2 600#			2,423	1	0	0	0 = 1		150 150	FM	3
Teaneck															
Holy Name	J A Sullivan	OB	40	2,848			541	1	0	0	0 = 1		270 270	FM	1
Trenton															
St Francis	J R Harman	OBG	52	3 696	4	25	2 609	1	1	0	0 = 2		210 210	FM	3
NEW MEXICO															
Albuquerque															
Bernalillo County-Indian	R Seligman	OBG	23	1 697	2	50	3 211	1	1	1	1 = 4		300 400	FP	3
NEW YORK															
Albany															
Albany [240]	R E L Nesbitt, Jr	OBG	83	5 114#	12	42	3 829	4	4	4	1 = 13		195 275	PM	3
A N Brady	J G Hayes	OB	40	3 119	31	71	2,796	1	1	1	0 = 3		160 195	FP	3
Buffalo															
Sisters of Charity	L Winkler	OBG	81	5,488	9	22	2 081	2	2	2	2 = 8		335-440	FM	3
Buffalo General [251]	C L Randall	OBG	79	4,504#	10	30	5 088	2	2	2	4 = 10		175 200	FP	3
Deaconess	W H Burwig	OBG	56	3 301	6	50	435	1	1	1	0 = 3		300 350	FM	3
Edward J Meyer Memorial [255]	E G Winkler	OBG	49	2,087	18	39	9 379	2	2	2	1 = 7		292 380	PM	3
Millard Fillmore	L F McLean	OBG	115	7 042	5	80		2	2	2	0 = 6		298 323	PM	3
Cooperstown															
Mary Imogene Bassett	O J Severud	OBG	9	548			5,525	1	0	0	0 = 1		200 350	PM	3
Hempstead															
Meadowbrook [--]	G T Lilly	OBG	48	2,537	21	43	7,007	2	2	2	0 = 6		275 275	FM	3
Mercy (Rockville Centre)															
Johnson City															
Charles S Wilson Memorial	S F Nagyfy	OBG	42	2 731	8	50	3,565	2	1	1	0 = 4		225 300	PM	3
Manhasset															
North Shore	A N Fenton	OBG	34	2 379#	1		841	2	1	1	0 = 4		200 250	FP	3
Mineola															
Nassau	J A Mellow	OBG	73	5 321	1	100	1 120	1	1	1	0 = 3		325 375	O	3
Mount Vernon															
Mount Vernon	N M Weinrod	OBG	41	2 372	4	50	1 681	1	1	1	0 = 3		200-200	FM	3
New York City															
Bellevue Hospital Center		OBG													3
Div III—New York University College of Medicine [-95]	G W Douglas		99	4 481	27	25	34 088	8	6	6	2 = 22		145 195	FM	
Beth El	W Levine	OBG	92	4 781	3	66	4,900	2	2	2	2 = 8		150 200	FM	3
Beth Israel	G Blinick	OBG	55	2 858	9	56	4 819	3	1	1	1 = 6		175 225	PM	3
Bronx	A C Posner A J Fleischer	OBG	61	3 260	7	43	6 702	2	2	2	0 = 6		145 195	FM	3
Bronx Municipal Hospital Center	S L Romney	OBG	50	2 680	9	33	16 499	4	4	3	3 = 14		215 215	FM	3
Brooklyn	A T Antony	OBG	67	2,842	1	100		1	1	1	0 = 3		175 200	FM	3
Brooklyn Womens	J Halperin	OBG	48	3 450	1	100	3 931	3	0	0	0 = 3		150 200	FM	3
City Hospital at Elmhurst	E F Smith	OBG	60	3,073	10	40	11 045	4	3	2	0 = 9		145 195		3
Coney Island	M Schram	OBG	32	1,998	4	50	6 988	2	2	1	0 = 5		145 195		3
Cumberland	C H Loughran	OBG	45	3 133	7	29	17,899	3	1	1	1 = 6		145 195		3
Flushing Hospital and Dispensary	E C Veprovsky	OBG	49	3,641	5	60	4 075	1	1	1	0 = 3		175 225	FM	3
Fordham	C G Muscillo	OBG	40	2 306	4	100	13 252	2	2	2	0 = 6		145 195		1
Francis Delafield [4]	H C Taylor Jr	GYN	25	296	54	39	1,559	1	0	3	1 = 5		145-195		3
French	C Heaton, H C Falk	OBG	41	1,908	7	14	3 880	2	1	1	0 = 4		120-145	FM	3

Numerical and other references are listed on pages 811 through 814

12 OBSTETRICS AND GYNECOLOGY—Continued

	Chief of Service or Program Director	Residencies Approved	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy percent	Outpatient visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Years	Stipend per Month: Min Max	Main Maintenance FM PM O	Length of Approved Program (Years)
NEW YORK—Continued															
Grand Central	M D Spelser	OBG	5	295#	2	50	69	2	0	0	0	= 2	135-165	FM	2
Greenpoint	S Kaminester	OBG	31	2 203	1	100	21 260	2	2	2	0	= 6	145-195		3
Harlem	A C Posner M I Bobrow	OBG	122	5 905	17	53	42 951	2	2	2	0	= 6			3
Hospital for Joint Diseases	F I Hecht	GYN	10	322	4	50	1 030	0	1	0	0	= 1	80-100	FM	1
Jamaica	M P Bates	OBG						1	1	1	0	= 3	200	FM	2
Jewish	C Birnberg	OBG		6 767	9	67	10 890	3	3	2	2	= 10	100 150	FM	3
Jewish Memorial	S Schlifrin A Tamis A Weisman	OBG	38	2 140	2	50	1 649	1	0	0	0	= 1	200 200	FM	1
Kings County Hospital Center	I M Hellman	OBG	132	12 345	59	306	43 413	8	4	4	4	= 20	145-195		3
Knickerbocker [4]	A Decker	GYN	21	647	3	66	1 054	1	1	0	0	= 2	150 200	PM	1
Lebanon		OBG													3
Lenox Hill	M Roderers	OBG	57	3 193	5	20	6 466	1	1	1	0	= 3	180 200	PM	3
Lincoln	W H Codsick	OBG	67	5 242	5	40	21 827	5	2	2	0	= 9	145 195	FM	3
Long Island College	M Glass	OBG	52	3 313	5	40	6 530	2	2	2	0	= 6	164 191	PM	3
Long Island Jewish	A Rosenthal	OBG	43	3 149	1		1 214	1	1	1	0	= 3	100 165	FM	3
Lutheran Medical Center	A S MacGregor	OBG	84	2 606			3 521	2	2	1	0	= 5	135 185	FM	3
Maimonide	L Solomons	OBG	108	6 077				2	2	2	2	= 8	75 150	FM	3
Mary Immaculate	J V Rizzi	OB		2 613#			2 400	2	0	0	0	= 2	170-200	FM	1
Methodist	H S Acken Jr S C Hall	OBG	58	3 914	4	75	7 049	2	2	2	2	= 8	175-200	FP	3
Misericordia	J A Kelly	OB	27	1 298	1	100	2 619	1	1	0	0	= 2	150 175	FM	2
Morrisania City	A B Tamis	OBG	45	2 823	7	28	14 665	2	2	2	0	= 6	145 195		3
Mount Sinai [5]	A F Guttmacher	OBG	123	7 360	16	31	23 393	12	2	2	2	= 18	100 100	FM	3
New York	R G Douglas	OBG	184	7 803	12	33	35 614	6	6	6	4	= 22	164 288	PM	3
New York Infirmary	I F Widenius I Knowlton	OBG	45	2 586	3		4 866	2	2	2	0	= 6	150 175	FM	3
New York Medical College-Metropolitan Medical Center		OBG													3
Flower and Fifth Avenue Hospitals	M I Stone		67	4 138	2	50	6 861	0	1	1	1	= 3	125-175	FM	3
Metropolitan	M L Stone		112	8 168	31	32	77 159	6	4	4	4	= 18	145-195	FM	
New York Polyclinic Medical School and Hospital	E H Dennen H H Jardaro	OBG	37	1 982	7	28	4 907	2	2	2	0	= 6	150 200	FM	3
New York University Medical Center		GYN													2
University	G Douglas		14	515	34	32	1 511	1	1	0	0	= 2	145-195	FM	
Presbyterian (Sloan Hospital for Women)	H C Taylor	OBG	142	7 672	5	80	44 257	7	6	4	3	= 20	250-417	PM	3
Queens Hospital Center	F C Neprovsky	OBG	54	3 246	21	30	10 731	2	1	1	0	= 4	115 195		3
Roosevelt	F R Smith	GYN	30	1 665	6	50	1 955	1	1	0	0	= 2	233 275	PM	2
St Catherines	W C Meagher	OBG	42	2 751	5	60	6 295	1	1	2	2	= 6	125 150	FM	3
St Clares [56]	M J Jordan	OBG	38	2 097	5	20	4 626	2	2	2	0	= 6	125 150	PM	3
St Francis	J S Lubate	OBG	36	1 170			4 734	1	1	1	0	= 3	125-225	FM	3
St Johns Episcopal	C W Mueller	OBG	52	3 655#	5		8 919	1	1	1	0	= 3	175 210	FM	3
St Marys	A A Schenone	OBG	43	2 708	1		6 451	1	1	1	0	= 3	200 250	FM	3
St Vincents	B J Pisani	OBG	81	4 692	6	83	13 180	2	2	2	2	= 8	175-250	FM	3
Sydenham	P M Murray	OBG	37	2 068	2	50	4 247	1	1	1	0	= 3	145-195		3
Unity	M Berlind	OBG	36	2 407	2		2 613	2	2	0	0	= 4	150 175	FM	2
Womans	C T Javert	OBG	138	6 512	25	12	27 521	8	4	4	0	= 16	100 175	FM	3
Wyckoff Height		OBG													1
Port Chester															
United	C N Jeffries	OB	30	1 302			640	1	0	0	0	= 1	235 250	PM	1
Rochester															
Genesee	A J Katelbaum	OBG	47	3 660	5	60	1 451	2	1	1	0	= 4	175 350	FM	3
Highland	D H Kariher	OBG	29	2 771	1	100	1 308	2	1	1	0	= 4	175-350	FP	3
Rochester General	J C Potter	OBG	48	3 917	4	100	2 348	1	1	1	0	= 3	175 225	FP	3
St Marys	F Dobrzynski	OBG					1 288	1	1	1	0	= 3	250 325	PM	3
Strong Memorial Rochester Municipal Hospitals	C J Lund	OBG	67	4 420#	10	88	9 937	3	2	2	1	= 8	166 291	O	3
Rockville Centre															
Mercy Hospital	See Meadowbrook Hempstead														
Schenectady															
Ellis	W J Jameson	OBG	50	2 811	5	60	1 178	2	1	1	0	= 4	325 400	FP	2
Syracuse															
General	R Rowner	OBG	31	2 567	3	33	2 984	2	1	0	0	= 3	261 300	O	2
St Josephs	L G Fournier	OBG	45	3 613	4	25	3 882	1	0	0	0	= 1	250 250	PM	1
State University of New York Upstate Medical Center	E C Hughes C E Clark	OBG	152	11 916	17	35	12 739	4	4	4	0	= 12	250 316	O	3
NORTH CAROLINA															
Chapel Hill															
North Carolina Memorial	R A Ross	OBG	25	1 814	9	44	13 193	2	2	3	3	= 10	175 266	O	3
Charlotte															
Charlotte Memorial	J H E Woltz	OBG	54	3 666#	1	100	3 705	1	1	0	0	= 2	295 345	PM	3
Durham															
Duke	B Carter	OBG	44	2 784	13	62	11 616	0	4	3	2	= 9	43 200	FM	3
Lincoln	L R Swift	OBG	13	1 072	2		2 926	2	0	0	0	= 2	225 275	FM	1
Watts	R L Pearse	OBG	20	1 811	1	100	1 676	2	0	0	0	= 2	300 350	FM	1
Raleigh															
Rex	P E Simpson	OBG	55	3 862	6	33	1 458	1	1	0	0	= 2	350	O	2
Winston Salem															
North Carolina Baptists	F R Lock	OBG	52	3 107#	8	75	5 379	2	2	2	0	= 6	166 208	PM	3
NORTH DAKOTA															
Fargo															
St Lukes	C B Darner	OBG	26	1 919	3	100		1	0	1	0	= 2	235	FM	3
OHIO															
Akron															
Akron City	E A Riemenschneider	OBG	95	6 012			2 637	2	2	1	2	= 7	275-375	FP	3
Akron General	N E Wentsler	OBG	55	4 983	5	40	3 758	2	2	2	2	= 8	300-400	FM	3
St Thomas	L B Mehl	OBG	50	3 344	3	66	883	2	2	1	0	= 5	250 350	FP	3
Canton															
Aultman	H I Keck	OBG	71	4 822	5	60	4 54	2	2	2	0	= 6	275-400	PM	3
Mercy	N Lewis	OBG	62	4 358	1	100	664	4	2	1	0	= 7	275 300	PM	3
Cincinnati															
Bethesda	W Graf	OBG	56	5 175	18	6	2 769	2	2	2	0	= 6	250-310	PM	3

Numerical and other references are listed on pages 811 through 814

12 OBSTETRICS AND GYNECOLOGY—Continued

	Chief of Service or Program Director	Residencies Approved	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O	Length of Approved Term (Years)
OHIO—Continued															
Good Samaritan	J G Crotty	OBG	100	6,900	13	62	175	2	2	2	0 =	6	250-300	FM	3
University of Cincinnati College of Medicine Hospital Group															
Cincinnati General	S Garber L Bossert	OBG	79	5,579	9	67	11,775	2	2	3	2 =	9	100-200	FM	3
Cleveland															
Cleveland Clinic	H P Taylor, J S Kilcker	OBG	28	1,701	8	75	1,005	2	2	2	2 =	8	275-350		3
Cleveland Metropolitan General	A F Bennett	OBG	58	4,717	2	50	2,097	4	4	3	3 =	14	150-258	FM	3
Evangelical Deaconess	J F Morgan	OBG	45	3,663#	3	67		1	1	1	0 =	3	175-225	FM	3
Fairview Park	H R Anderson	OBG	76	4,954#	6	100	727	1	1	1	0 =	3	250-350	FP	3
Huron Road	S I Burkhart	OBG	63	3,427	7	57	936	2	2	2	0 =	6	210-225	FP	3
Lutheran	R A Schroeder	OBG	23	1,874				2	1	0	0 =	3	250-262	PM	3
Mount Sinai	J Gross	OBG	54	3,856	2	100	7,826	2	2	2	0 =	6	215-235	FM	3
St Ann	A H Dindia	OBG	49	3,764			1,578	2	2	1	0 =	5	200-300	FM	3
St John's		OBG	56	2,786	5	40	140	2	1	1	0 =	4	225-300	FM	3
St Luke's	G B Hurd	OBG	74	4,715	11	45	6,551	1	1	1	1 =	4	200-305	FM	3
University Hospitals of Cleveland	A C Barnes	OBG	104	6,914	9	33	29,510	3	3	3	3 =	12	150-250	PM	3
Columbus															
Mount Carmel	R E Daly P J Reel	OBG	57	5,302	3	100	3,034	1	1	1	0 =	3	275-325	FP	3
Ohio State University Hospitals University	J C Ullery	OBG	91	6,757	21	62	21,973	3	3	3	3 =	12	177-277	PM	3
White Cross—St Ann's Hospital for Women	R M Inglis J Gallen J Gallagher	OBG	91	8,927	1	100	2,443	3	3	3	1 =	10	290-365	PM	3
Dayton															
Good Samaritan	C De Bold	OBG	91	6,585	6	33		1	1	1	0 =	3	250-275	FM	3
Miami Valley	K Champion	OBG	100	7,614#	15	53	2,238	1	1	1	1 =	4	225-250	FP	3
Garfield Heights															
Marymount	B S Malasky	OBG	28	1,864	1	1	61	2	0	0	0 =	2	250-250	FM	1
Hamilton															
Mercy	H T Atkins	OBG	47	3,218	8	25		2	1	1	0 =	4†	200-300	FM	3
Lima															
St Rita's	V A Noble	OBG	54	3,269	2	100	324	1	1	0	0 =	2	400-450	PM	3
Toledo															
Maumee Valley	J J Hillabrand	OB	16	927	1		1,173	1	0	0	0 =	1	285-285	FP	1
Mercy	R C Kunz	OBG	72	3,662	3	33	2,059	1	1	1	0 =	3	275-325	FM	3
St Vincent's	M W Diethelm	OBG	67	4,335#	8	50	1,927	1	1	1	0 =	3	275-325	FP	3
Toledo	J F Miller	OBG	70	4,632	4	25		1	1	1	0 =	3	275-325	FM	3
Warren															
Trumbull Memorial	A J Schaffer	OBG	45	3,313	1	100		2	2	2	0 =	6	300-400	FP	3
Youngstown															
St Elizabeth	P J Boyle	OBG	84	4,783			2,180	2	2	2	0 =	6	300-350	FM	3
OKLAHOMA															
Oklahoma City															
St Anthony	G Rogers	OBG	95	6,138	11	45	6,670	1	1	1	0 =	3	300-350	FM	3
University of Oklahoma Medical Center	M J Serwer J W Kelso	OBG						2	2	2	0 =	6			
University Hospitals			41	3,233	3	67	14,996						200-250	PM	
Tulsa															
Hillcrest Medical Center	D N Burns	OBG	[illegible]	4,441	4		3,263	2	2	1	0 =	5	200-300	FM	1
St John's	D N Burns	OBG	103	6,790	3	33	2,867	1	1	1	0 =	3	175-250	FP	3
OREGON															
Portland															
Emanuel	D W James	OBG	97	7,169#	19	68		2	2	2	0 =	6	275-295	PM	3
University of Oregon Medical School Hospitals and Clinics	R C Benson	OBG	39	2,378	14	64	10,638	2	2	2	0 =	6	165-215	FM	3
Pennsylvania															
Abington															
Abington Memorial	R D Porter C M Furman	OBG	64	4,374	[illegible]	40	2,964	1	1	1	0 =	3	275-375	FM	3
Allentown															
Allentown	J C Schneffer	OBG	80	4,246	10	40	1,282	1	1	1	0 =	3	225-275	FM	3
Sacred Heart	S I Seaman	OBG	62	5,318	6	50	686	1	1	1	0 =	3	225-275	FP	3
Altoona															
Altoona	I I Williams	OBG	44	2,482	4		1,375	1	0	0	0 =	1	325-375	FM	1
Bethlehem															
St Luke's	F J Pearson	OBG		3,012	42	56	919	1	1	0	0 =	2	225-300	FP	2
Danville															
George F Geisinger Memorial	K I Nicodemus	OBG	26	1,436	7	43	10,811	1	1	1	0 =	3	175-225	FM	3
Darby															
Thomas M Fitzgerald Mercy	J V Missett	OBG	79	5,805	4	50	2,862	2	2	2	0 =	6	250-350	PM	3
Erie															
St Vincent	D R Palmer	OBG	47	3,924	3	33	1,950	1	1	1	0 =	3	275-325	FM	3
Harrisburg															
Harrisburg	W P Dailey	OBG		5,521	6	33	5,865	2	1	1	0 =	4	250	FP	3
Philadelphia															
Albert Einstein Medical Center Northern Division	C Weinstein	OBG	115	4,762	10	40	4,082	2	1	2	0 =	5	125-200	FM	3
Southern Division	V Ernst	OBG	43	2,363	4	75	4,755	1	1	1	0 =	3	125-200	FM	3
Chestnut Hill	Z B Newton	OBG	37	2,619	2		1,384	1	1	0	0 =	2	350-500	FM	3
Episcopal	J H Dugger	OBG	12	5,008	3	33	1,858	1	1	1	0 =	3	100-100	FP	3
Frankford	G C Hanna II	OBG	58	3,334	3		1,980	1	1	1	0 =	3	275-325		
Germantown Dispensary and Hospital	Z B Newton	OBG	22	2,503	4	75	4,807	1	1	1	0 =	3	175-200	FM	3
Graduate Hospital of the University of Pennsylvania	S L Israel	GYN	12	518	8	37	2,197	1	1	0	0 =	2	75-100	FM	2
Hahnemann Medical College and Hospital	N T Paxson	OBG	63	2,741	31	52	7,791	3	3	3	0 =	9	75-75	FM	3
Hospital of the University of Pennsylvania	F L Payne	OBG	96	5,303	12	93	17,609	4	4	4	0 =	12	125-125		3
Hospital of the Woman's Medical College of Pennsylvania	M D Pettit	OBG	21	2,538	2	100	6,297	1	1	1	1 =	4	125-175	FM	3
Jefferson Medical College	T Montgomery, J Montgomery	OBG	99	5,469	18	50	17,275	0	2	3	3 =	8	100-150	PM	3

Numerical and other references are listed on pages 811 through 814

12 OBSTETRICS AND GYNECOLOGY—Continued

	Chief of Service or Program Director	Residencies Approved	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Years	Stipend per Month: Min Max	Main Maintenance FM PM O	Length of Approved Program (Years)
PENNSYLVANIA—Continued															
Lankenau	R B Wilson	OBG	50	3 784	6	50	2 027	1	1	1	0	= 3	200-250	FM	3
Mercy-Douglass	H O Dickens	OBG	15	1 550			2 796	3	0	0	0	= 3	200-200	FM	1
Methodist Episcopal	G A Hahn	OBG	35	1 789	3	67	2 518	1	1	1	0	= 3	200-225	FM	3
Misericordia [5]	J E Lynch	OBG	43	3 147			3 901	1	1	1	1	= 4	250-400	FM	3
Pennsylvania	R A Kimbrough	OBG		6 415	10	80	13 648	3	3	2	0	= 8	20- 40	FM	3
Philadelphia General	P Bower M Pettit	OBG	94	7 742	26	68	21 248	3	3	3	0	= 9	128-265	FM	3
Presbyterian [331]	J Corbit	OBG	37	2 207	8	50	3 456	1	1	1	0	= 3	235-290	FM	3
Temple University	J R Willson	OBG	125	7 007	10	30	21 174	5	5	5	0	= 15	175-225	PM	3
Women's	A G Taylor S A Mazer	OBG	29	1 615	5	60		2	1	1	0	= 4	175-200	FM	3
Pittsburgh															
Health Center Hospitals of the University of Pittsburgh School of Medicine															
Elizabeth Steel Magee	M L McCall	OBG	217	11 502	28	61	10 390	4	4	4	0	= 12	125-175	FM	3
Mercy	J A Schneider G J Carlin	OBG	69	3 415	8	50	1 581	1	1	1	0	= 3	235 285	FM	3
Montefiore	W J Fineg old	OB	22	1 459	2	50	1 410	2	0	0	0	= 2	225 225	FM	1
Pittsburgh	E A Conti	OBG	41	2 466	1		810	1	1	0	0	= 2	200 300	FM	2
St Francis General Hospital and Rehabilitation Institute	J H Carroll J A Hepp	OBG	53	3 994	9	44	1 985	0	1	2	0	= 3	240 305	FP	3
St Margaret Memorial	R F Tafel	OBG		1 519	4	75	1 398	1	1	0	0	= 2	300-300	FM	2
South Side	J A New H W Thomas	OBG	45	2 681	1	100	1 064	1	1	0	0	= 2	350 350	FM	2
Western Pennsylvania	A C Williamson	OB	34	1 763#			2 316	1	0	0	0	= 1	250 300	FP	1
West Reading															
Reading	F B Nugent	OBG		2 425	12	89	969	1	1	1	0	= 3	225 300	FM	3
PUERTO RICO															
Caparra Heights															
University	I Pelegrina	OBG	41	2 663	5	40	4 669	2	2	2	0	= 6	250-350	FM	3
Ponce															
Ponce District General	A Lamm	OBG	55	2 787	8	100	5 426	2	2	0	0	= 4	250 350	FM	3
San Juan															
San Juan City	R A Gil	OBG	64	6 027	10	80	24 966	6	3	3	0	= 12	175 325	FM	3
RHODE ISLAND															
Providence															
Providence Lying-in-Rhode Island	W S Jones H C McDuff Jr	OBG	148	10 218	18	78	4 460	1	1	0	0	= 2	150 175	FM	3
SOUTH CAROLINA															
Charleston															
Teaching Hospitals of the Medical College of South Carolina	L L Hester Jr	OBG	60	5 139	5	60	14 304	2	2	2	2	= 8	138 168	FM	3
Medical College															
Roper															
Columbia															
Columbia	H H Fouche	OBG	65	4 287	15	27		1	1	1	0	= 3	200 315	FP	3
Greenville															
Greenville General	W Hearin	OBG	80	5 721#	18	39	5 556	2	1	1	0	= 4	275 325	O	3
SOUTH DAKOTA															
Yankton															
Sacred Heart	B Ranney	OBG	18	1 484#	2			1	0	0	0	= 1			3
TENNESSEE															
Chattanooga															
Baroness Erlanger	H Jones	OBG	89	5 979	11	45	9 514	3	2	2	0	= 7	375-375	FM	3
Knoxville															
University of Tennessee Memorial Research Center and Hospital	A W Diddle	OBG	25	1 981			3 713	1	1	1	0	= 3	320-340	FM	3
Memphis															
Baptist Memorial	B E Everett	OBG	87	5 241	7	14	1 801	1	1	1	0	= 3	325 375	PM	3
City of Memphis Hospitals	P C Schreier	OBG		9 113	90	39	5 349	5	5	5	0	= 15	150 200	FP	3
St Joseph [35]	H Feinstein	OBG	47	3 175	5	60	2 266	1	1	1	0	= 3	325-375	FM	3
Nashville															
Baptist	S C Cowan Jr	OBG	64	4 876	2		2 340	1	2	2	0	= 5	300 300	FM	3
George W Hubbard [3 5]	W F B James	OB	17	1 673	2	50	3 962	2	2	0	0	= 6	162 200	FM	2
Vanderbilt University Affiliated Hospitals															
Nashville General	F E Whitacre	OBG	21	1 838	5		9 259	1	1	1	0	= 3	325 375	FP	3
Vanderbilt University	F E Whitacre	OBG	42	2 602	10	30	12 500	3	3	3	3	= 12	100 125	FM	3
St Thomas [3 8]	S Bayer	OBG	38	3 310	2	50		2	2	1	0	= 5	300-300	FP	2
TEXAS															
Dallas															
Baylor University	W K Strother Jr	OBG	118	11 089	4	50	4 752	3	2	2	0	= 7	210 230	PM	3
Methodist [3 9]	S Cobb	OBG	59	5 987	3	33	3 087	2	1	1	0	= 4	225 275	FP	3
Parkland Memorial	J Pritchard	OBG	101	8 388	6	83	36 967	6	7	3	0	= 16	150 200	PM	3
St Paul's	H I Kantor	OBG	74	7 075	2	50	7 409	2	2	1	0	= 5	225 275	FP	3
Fort Worth															
Harris	A C Watson	OBG	57	6 307	6		232	3	0	0	0	= 3	300-300	FP	1
Galveston															
University of Texas Medical Branch Hospitals	W J McGanity	OBG	56	2 769	9	56	14 580	3	3	3	3	= 12	160-160	FP	3
Houston															
Baylor University College of Medicine Affiliated Hospitals		OBG													3
Jefferson Davis	S H Wills		49	5 512	17	59	25 698	3	3	5	0	= 11	125-165	FM	
Methodist	H P Arnold J A Wall		60	4 102	2	50	3 727	2	2	0	0	= 4	100-175	FM	
Hermann	T G Gready Jr A M Faris	OBG	116	8 961	7	57	18 804	2	2	2	0	= 6	125-175	FM	3
University of Texas Post Graduate Medical School Affiliated Hospitals [367]															
St Joseph's	M J Meynier	OBG	80	6 910	2	100	5 669	0	2	2	0	= 4	220-270	PM	3
St Luke's Episcopal [39]	H L Gardner	OBG	62	4 605				3	0	0	0	= 3	100-100	FM	1
University of Texas M D Anderson Hospital & Tumor Institute [4]	F Rutledge	GYN	31	1 091	24	88	4 528	0	0	4	0	= 4	300-300	O	1
San Antonio															
Baptist Memorial	W Strozier	OBG	58	6 441	12	33		1	2	0	0	= 3	150-250	FP	2
Robert B Green Memorial	G G Passmore	OBG	50	4 654	9	66	15 952	2	2	2	0	= 6	150-300	FM	3

Numerical and other references are listed on pages 811 through 814

12 OBSTETRICS AND GYNECOLOGY—Continued

	Chief of Service or Program Director	Residencies Approved	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Years	Stipend per Month: Min Max	Main Maintenance FM PM O	Length of Approved Residency Train (Years)
UTAH															
Ogden															
Thomas D Dee Memorial	V L Ward	OBG	30	3,385			421	1	0	3	0	= 4	325 350	PM	3
Salt Lake City															
Dr W H Groves Latter Day Saints	A K Smith	OBG	81	7,747	7	71	1,201	2	2	2	0	= 6	250-325	FP	3
Holy Cross	M S Coombs	OBG	37	3,081	6	67		1	1	1	0	= 3	175-400	FP	3
Salt Lake County General	I H Kaiser	OBG	10	1 103	3	33	5,453	1	4	0	0	= 5	280-280	O	3
VERMONT															
Burlington															
University of Vermont Affiliated Hospitals		OBG													3
De Goesbriand Memorial	W Slavin		22	1,422#			233						208-208		
Mary Fletcher [372]	J V S Maeck		30	2,066	5	100	1 598	1	1	1	0	= 3	100 163	FMO	
VIRGINIA															
Alexandria															
Alexandria	H Pleot	OBG	52	4,933#	1	100	3 564	3	0	0	0	= 3	275-350	PM	3
Arlington															
Arlington	I B Jacobs	OBG	42	3 902	1	2	7,56	2	0	0	0	= 2	215 215	FM	1
Charlottesville															
University of Virginia	W N Thornton Jr	OBG	51	3 501	7	29	9,474	4	2	2	2	= 10	75 150	FM	3
Newport News															
Riverside	W R Payne	OBG	49	3 420#	6	50		1	1	1	0	= 3	250 350	FM	3
Norfolk															
De Paul	W I Byrd	OBG	56	4,382	2	100	3 500	2	1	1	0	= 4	225 275	FM	3
Norfolk General	B D Jones	OBG	69	5,479	10	100	6 266	2	1	1	0	= 4	215 315	FM	3
Richmond															
Johnston Willis	F Rucker	OBG	23	1 661#	2			1	0	0	0	= 1	250 250	FM	1
Medical College of Virginia-Hospital Division	H H Ware Jr	OBG	127	8 843	22	50	13 716	4	4	4	0	= 12	100 150	FM	3
WASHINGTON															
Seattle															
University of Washington Affiliated Hospitals		OBG													3
King County Hospital Unit No 1 (Harbor View)	R R De Alvarez		33	1 864#	8	63	8 013	4*	4	4	4	= 16	150 330	FM	
	R R De Alvarez			42#			396	5	3	4	3	= 15	180-350	PM	
University	R Lowden	OBG	29	2,747#	1	100	860	1	1	0	0	= 2	300-400	FP	3
Providence [375]	R P Smith	OBG	55	3 630			830	3	0	0	0	= 3	225 275	FP	1
Swedish Hospital	V I Banks	OB	21	2 244	1	100		1	0	0	0	= 1	125-125	FP	1
Virginia Mason															
Spokane															
Seared Heart	I I Black	OBG	62	5 442	8	56		1	1	1	0	= 3	250 325	FP	3
St Luke's	I V Moyer	OBG	9	1 417	1			0	1	0	0	= 1	225-225	FM	1
WEST VIRGINIA															
Charleston															
Memorial	J I Cates	OBG	38	2 495			1 389	1	1	0	0	= 2	250 275	FP	1
WISCONSIN															
Madison															
University Hospitals	B M Peckham	OBG	21	1 078	8	88	6 668	2	3	2	1	= 8	100 250	FM	3
Madison General	W C Massey		54	3 918	4	100		1	0	0	0	= 1	250 250	FM	
St Mary's															3
Milwaukee															
Milwaukee County	B F Urdan	OBG	52	3 165	15	33	13 022	2	2	2	0	= 6	229 334	PM	3
Milwaukee [384]	F I Hofmeister	OBG		1 211	5	40		2	0	0	0	= 2	281 331	FM	3
Mount Sinai	V M Kurzon	OBG	8	2 971	8	50	710	2	2	1	0	= 5	300-350	PM	3
St Joseph's	J A Klieger	OBG	91	7,030	6	67		2	2	2	0	= 6	300-350	FM	1
St Luke's	S Korducki	OBG	49	3 437	3	33	562	3	0	0	0	= 3	275 275	O	3
St Mary's [380]	D Weiner I D Owen	OBG	47	3,052	2	100		1	1	0	0	= 2	300 350		

13 OCCUPATIONAL MEDICINE

The programs in Occupational Medicine which have been approved by the Council and the American Board of Preventive Medicine through the Residency Review Committee for Preventive Medicine, will be found listed under Preventive Medicine, p 762

14 OPHTHALMOLOGY

Residency programs in the following hospitals have been approved by the Council and the American Board of Ophthalmology through the Residency Review Committee for Ophthalmology, as offering acceptable training in the specialty

Hospitals 171, Residencies 775

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O	Length of Approved Residency Train (Years)
UNITED STATES AIR FORCE														
TEXAS														
U S Air Force, San Antonio	A C Tenney	82	1 165#	2	100	7 622	2	2	2	0	= 6			3
UNITED STATES ARMY														
CALIFORNIA														
Letterman General, San Francisco	R R Kelley	22	1 174			21,219	1	1	1	0	= 3			3
COLORADO														
Fitzsimons General, Denver	J E Edwards	12	265			9,225	1	1	1	0	= 3			3
DISTRICT OF COLUMBIA														
Walter Reed General, Washington	A Lowrey, Jr	49	668			47,844	2	2	2	0	= 6			3

Numerical and other references are listed on pages 811 through 814

14 OPHTHALMOLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	FM Main FM PM O	Length of Approved Program (Years)
TEXAS														
Brooke General San Antonio	C O Rixey	27	479			13 710	1	1	1	0	= 3			3
UNITED STATES NAVY														
CALIFORNIA														
U S Naval Oakland	W I Erdbrink	23	369			19 440	1	1	0	0	= 2			3
U S Naval San Diego	R P Nadbath	32	401			17 060	1	2	2	0	= 5			
MARYLAND														
U S Naval Bethesda	S J Ryan	16	215			7 315	1	1	1	0	= 3			3
PENNSYLVANIA														
U S Naval Philadelphia	J I Thorn	20	243			8 217	1	1	1	0	= 3			3
UNITED STATES PUBLIC HEALTH SERVICE														
CALIFORNIA														
U S Public Health Service San Francisco	W W Richards	10	204	1	100	6 570	1	1	1	0	= 3			3
LOUISIANA														
U S Public Health Service New Orleans	W F Hoyle	8	150			4 286	1	1	1	0	= 3			3
MARYLAND														
U S Public Health Service Baltimore	W F Newby	6	145			4 585	1	1	1	0	= 3			3
National Institute of Health—Clinical Center Bethesda	F V Salimann						4	0	0	0	= 4			2
NEW YORK														
U S Public Health Service New York City	J B Peebles	14	222			8 247	1	1	1	0	= 3			3
DEPARTMENT OF HEALTH EDUCATION AND WELFARE														
DISTRICT OF COLUMBIA														
Freedmen's Washington	C I Cowan	2	101			3 335	0	1	1	0	= 2	308-417	PM	3
OTHER FEDERAL														
CANAL ZONE														
Balboa Heights														
Gorgas Hospital	R H Rupp	3	153			7 520	1	1	1	0	= 3	418 593	O	3
NONFEDERAL AND VETERANS ADMINISTRATION														
ALABAMA														
Birmingham														
University of Alabama Medical Center														3
University Hospital and Hillman Clinic	S J Kelly C P Grant	21	917	1		7 969	2	2	2	0	= 6	118-125	FM	
Veterans Administration	S J Kelly	4	91			169						271 347	O	
Tuskegee														
Veterans Administration	A I Brewer	6	61			535	1	1	1	0	= 3	271 347	O	3
ARKANSAS														
Little Rock														
University of Arkansas Medical Center and Affiliated Hospital														3
Arkansas Baptist University	P P Ellis	12	135			2 717	2	2	2	0	= 6	170 237	O	
Veterans Administration														
CALIFORNIA														
Fresno														
General Hospital of Fresno County	D Trowbridge	7	142	1	100	6 471	1	1	1	0	= 3	300-325	PM	3
Los Angeles														
Los Angeles County [1]	W J Endres H F Whalman	42	1 015	2	100	32 457	2	2	2	0	= 6	273 303	PM	3
Los Angeles Eye & Ear [1]	J A Bullis	10				4,271	2	2	0	0	= 4	210 260	PM	2
University of California	B R Straatsma	9	382			12 169	2	2	2	0	= 6	240 426	FPO	3
Veterans Administration	C S Mumma	16	440	1	100	2,583	2	1	1	0	= 4	271 348	PM	3
White Memorial	C K Kambara	5	365			9 788	1	1	1	0	= 3	215-235	PM	3
Oakland														
Highland Alameda County	M Camp	6	201			9 132	1	0	1	0	= 2	200-295	FM	3
San Francisco														
Presbyterian Medical Center	F W Bettman	10	492			6 154	1	1	1	0	= 3	100-175	PM	3
University of California [1]	M J Hogan	5	2 128	1	100	11 044	5	2		0	= 15	243-310		2
Veterans Administration	D O Harrington M Fine	10	225			898	1	1	1	0	= 3	271-462	O	3
Torrance														
Harbor General	B R Straatsma	3	140 est			5 381	1	1	1	0	= 3	273 303	FM	3
COLORADO														
Denver														
University of Colorado Medical Center														3
Colorado General	J C Long	4	200			14,355	2	2	2	0	= 6	180 265	O	
Denver General	G A Filmer		1 722 est			3 394						179 265		3
CONNECTICUT														
New Haven														
Yale-New Haven Medical Center														3
Grace-New Haven Community	R M Fasanella	11	695			7 910	1	1	1	0	= 3	150-125	FM	
DISTRICT OF COLUMBIA														
Washington														
District of Columbia General	R Cox J F O Rourke	10	111	2	100	8,397	0	3	0	0	= 3	258-258	O	2
Georgetown University Medical Center														3
Georgetown University	J O Rourke	6	126			2 430	3	2	2	0	= 7	175-310	FM	
Veterans Administration	G A Higgins	5	40 est			152	0	0	1	0	= 1	271 347	O	
Washington Hospital Center	J Dessoff	38	1 095	3	33	26 092	3	3	3	0	= 9	215-245	FP	3
FLORIDA														
Miami														
Jackson Memorial	F W D Norton		1 167	1		10 647	3	3	4	0	= 10	200-275	PM	3

Numerical and other references are listed on pages 811 through 814

14 OPHTHALMOLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main tenance FM PM O	Length of Approved Program (Years)
GEORGIA														
Atlanta														
Grady Memorial	F P Calhoun Jr	17	534			15 833	2	2	2	0 =	6	100-200	FM	3
Augusta														
Medical College of Georgia Hospitals														3
Eugene Talmadge Memorial	I Fair	8	202			1,612	1	0	0	1 =	2	250 583	O	3
ILLINOIS														
Chicago														
Cook County	T N Zekman	28	662	6	16	21 941	3	2	1	0 =	6	140-140	FM	3
Michael Reese	T M Shapira	24	1 093	1	100	5 391	2	2	0	0 =	4	125 150	FP	3
Northwestern University Medical Center														3
Chicago Wesley Memorial	W A Mann	9	253			5,109	1	1	0	0 =	2	125 150	FM	
Passavant Memorial	D Vail	10	564				1	0	1	0 =	2	225 275	PM	
Veterans Admin Research	D P Vail	17	205	1			1	0	1	0 =	2	271-462	O	
Presbyterian-St Luke's	W F Hughes	1	409			6 000	1	1	0	0 =	2	125 175	FM	3
University of Chicago Clinics	F W Newell	11	446			10,651	1	1	1	0 =	3	250 305	O	3
University of Illinois Hospitals														3
Illinois Eye and Ear Infirmary	P C Kronfeld	62	1 738	1	100	59 262	7	5	5	1 =	18	160 215	PM	
Research and Educational Hospitals	P C Kronfeld	9	320	1	100	9 871	0	2	2	0 =	4	160 215	PM	
Evanston														
Evanston	C R Soper	10	283			836	1	1	0	0 =	2	225 275	PM	3
Hines														
Veterans Admin	W Mann	25	290	3	67	316	2	2	2	0 =	6	271 347	O	2
INDIANA														
Indianapolis														
Indiana University Medical Center and Affiliated Hospitals														3
Indiana University Medical Center Hospitals [100]	F M Wilson	12	401			12 000	5	5	5	0 =	15	225 275	PM	
Marion County General	M Bartley	5	169			7,105	1	1	1	0 =	3	269 321	PM	
IOWA														
Iowa City														
State University of Iowa Hospitals	A E Braley	38	1 776	1	100	19 971	5	5	5	2 =	17	200 250	FM	3
KANSAS														
Kansas City														
University of Kansas Medical Center	A LeMoine	11	680	1		4 516	1	1	1	0 =	3	125 175	PM	3
KENTUCKY														
Louisville														
University of Louisville Medical Center	C D Townes	7	169	2	50	8,019	2	2	2	0 =	6	219 282	FM	3
Louisville General														
Veterans Admin	R MacDonald													
LOUISIANA														
New Orleans														3
Charity Hospital of Louisiana		5	580			9,613	2	1	1	0 =	4	125 175	FM	
Louisiana State University Unit	G M Hauk	8	658	1		11 043	0	2	2	0 =	4	125 175	FM	
Tulane University Unit	I H Allen	76	334			22 307	5	0	0	0 =	5	125 150	FM	3
Eye Ear Nose and Throat	I H Allen	2	87			4 666	1	1	1	0 =	3	225 275	PM	3
Ochsner Foundation	R A Schimek	12	165			1,362	1	1	1	0 =	3	270 348	O	3
Veterans Admin [183]	I H Allen													
Shreveport														
Confederate Memorial Medical Center	K B Jones	26	714			6,634	1	1	1	0 =	3	125 200	FM	3
MARYLAND														
Baltimore														
Baltimore Eye Ear and Throat	R Smith	33	1 137			13 197	1	1	1	0 =	3	150-200	FM	3
Johns Hopkins	A E Maumanee	57	2 169#			17 873	4	4	4	1 =	13	227 360	PM	3
MASSACHUSETTS														
Boston														
Boston City	D R Alpert	28	594			18,837	3	3	3	0 =	9	178-208	FM	3
Massachusetts Eye and Ear Infirmary	F B Dunphy	142	4 575	1	100	45,170	5	5	2	0 =	12	200-200	O	3
Massachusetts Memorial Hospitals	T Gundersen	4	271	1		2,865	1	1	0	0 =	2	175-275	O	2
Veterans Admin														
MICHIGAN														
Ann Arbor														
University [208]	F B Fralick	14	765	2	100	14 129	5	5	6	0 =	16	180 250	O	3
Detroit														
Harper	A D Ruedemann Sr	26	1 222#			4 700	2	2	2	0 =	6	275 325	PM	3
Henry Ford	J S Guyton	27	695	1	100	23 180	4	4	5	1 =	14	265 365	PM	3
Sinai														3
Wayne University Affiliated Hospitals	A D Ruedemann	6	298			517	0	0	1	0 =	1	270 347	O	
Veterans Admin (Dearborn)	A D Ruedemann	24	669	2		26 935	0	0	2	0 =	2	325-400	PM	
Receiving														
MINNESOTA														
Minneapolis														
Minneapolis General	K E Sandt	3	122			3,372	1	1	0	0 =	2	235-235	FM	3
University of Minnesota Hospitals [218]	J E Harris	24	203	2	100	6 508	4	4	4	0 =	12	244 244		3
Veterans Admin [221]	J P Wendland	11	144	1	100	3 432	1	1	1	0 =	3	271-462	O	
Rochester							5	5	5	0 =	15	200 200	PM	3
Mayo Foundation [229]	C W Rucker		793											
St Paul														
Ancker	H Monahan	4	141	1		5,193	1	0	0	0 =	1	235 235	FM	3
Charles T Miller	A F Adair	15	843#			3 970	1	1	0	0 =	2	325 375	PM	3
MISSISSIPPI														
Jackson														
University of Mississippi Medical Center	S B Johnson	1	86#			914	0	1	1	0 =	2	250 300	O	3
University	L Mayer	5	164#			1,664								
Veterans Admin														

Numerical and other references are listed on pages 811 through 814

14 OPHTHALMOLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O	Length of Approved Program (Years)
MISSOURI														
Columbia														
University of Missouri Medical Center														3
Kansas City														
Kansas City General	A J Baer	5	213			6 045	1	1	1	0	= 3	220 265	PM	3
St. Louis														
Barnes	B Becker	39	1 919			24 533	8	4	4	1	= 17	150-250	FM	3
Homer G Phillips	H P Venable	7	170	1		7 687	2	2	1	0	= 5	235-299		3
St Louis City	D Bisno	7	248	2	100	8 758	2	2	2	0	= 6	234 299	PM	3
St Mary's Group of Hospitals of St Louis University	R D Mattis	10	492			7 773	2	2	1	0	= 5	150 170	FM	3
Veterans Admin	H Rosenbaum	9	162	2	100		1	1	1	0	= 3	271 462	O	3
NEBRASKA														
Omaha														
University of Nebraska	J H Judd	4	114			3 966	1	1	1	0	= 3	225 300	PM	3
NEW JERSEY														
Jersey City														
Jersey City Medical Center	F X Brophy	11	411	2	50	3,254	1	1	1	0	= 3	108-200	FM	3
Newark														
United Hospitals of Newark Newark Eye and Ear Infirmary	W H Hahn	30	1 233	2	50	8 165	0	2	1	0	= 3	150-	FM	3
NEW YORK														
Buffalo														
Buffalo General	I J Kornig	12	442#	1	100	1 434	1	1	0	0	= 2	175-200	FP	2
Edward J Meyer Memorial [56]	W Y Jones	10	272			15 126	2	2	2	0	= 6	292-332	PM	3
New York City														
Bellevue Hospital Center														
Div IV—New York University Post Graduate Medical School [56]	G M Breinin	35	589			24 280	5	5	5	0	= 15	145 195		3
Bronx Eye and Ear Infirmary														3
Bronx Municipal Hospital Center	M Chamlin	6	223	1	100	10 396	2	2	2	0	= 6	215-215	FM	3
Brooklyn Eye and Ear	M A Lasky	29	3 208	4		39 981	4	4	0	0	= 8	100 125	FM	2
City Hospital at Elmhurst	I D Spivack	10	78			4 534	1	1	1	0	= 3	145-195		2
Harlem Eye and Ear	P Muller	8	659			13 534	1	1	0	0	= 2	180 200	FM	2
Jewish Hospital of Brooklyn	M Lasky		198	1		4 571	1	1	1	0	= 3	100 125	FM	3
Kings County Hospital Center [56]	R Troutman	25	542	3	33	18 191	2	2	2	0	= 6	145 195		3
Lenox Hill	B Payne	10	348			4 192	1	1	1	0	= 3	180 200	PM	3
Manhattan Eye Ear and Throat	R F Paton	69	3 141	4	25	51,857	6	6	0	0	= 12	100	FM	2
Montefiore	S Gartner	6	312			11 529	1	2	0	0	= 3	207 212	PM	3
Mount Sinai	I Laval	13	543	4	25	9 192	1	1	1	0	= 3	100 100	FM	3
New York Eye and Ear Infirmary	B F Payne	86	3,800	4		61 604	6	0	0	0	= 6	50 100	FM	3
New York	J McLean	22	902	1	100	11 864	2	2	2	0	= 6	164 263	PM	3
New York Polyclinic Medical School and Hospital	S Schutz	3	138			5 577	1	1	0	0	= 2	150 175	FM	2
New York University—Metropolitan Medical Center														
Metropolitan	B Friedman	7	168	1	100	10 848	2	1	0	0	= 3	145 195	FM	2
Presbyterian (Institute of Ophthalmology)	A G DeVoe	55	3 190			28 300	3	3	3	0	= 9	250 308	PM	3
Queens Hospital Center	T D Angelo	5	196	1	100	3 832	1	1	0	0	= 2	145 195		2
St Johns	H Fykers	3	162	1	100	4 923	1	1	0	0	= 2	125 150	FM	2
St Vincent	R Catrowjo	12	461	15	33	5 372	1	1	1	0	= 3	175 225	FM	3
Veterans Admin (Bronx) [56]	A S Hutt	19	331			46	1	1	1	0	= 3	270-347	O	3
Veterans Admin (Brooklyn)	M A Lasky	16	183			344	1	1	0	0	= 2	271 293	O	2
Rochester														
St Marys	C T Sullivan					736	1	0	0	0	= 1	250 325	PM	2
Strong Memorial Rochester Municipal	J F Cipner	10	481#			3 670	1	1	1	0	= 3	166 291	O	3
Syracuse														
State University of New York Upstate Medical Center	J I McCraw	14	551			4 851	1	1	1	0	= 5	250 310	O	3
NORTH CAROLINA														
Chapel Hill														
North Carolina Memorial	S D McPherson	2	80			4 108	1	1	0	0	= 2	175 266	O	3
Durham														
Duke University Affiliated Hospitals														3
Duke	W B Anderson	15	595	1		11 184	2	2	2	1	= 7	43 200	FM	
Veterans Admin	W B Anderson	8	166#				0	1	1	0	= 2	270-467	O	
McPherson	S D McPherson Jr	16	803			24 244	1	1	1	0	= 3	260-350	O	3
Winston Salem														
North Carolina Baptist	R W Roberts	5	350#	1		2 663	1	1	1	0	= 3	166 208	PM	
OHIO														
Cincinnati														
University of Cincinnati College of Medicine Hospital Group														3
Cincinnati General [305]	D Lyle	18	310	1		8 557	2	2	2	0	= 6	150 270	FM	
Cleveland														
Cleveland Clinic [306]	R J Kennedy	10	387	5	40	18 604	3	2	2	0	= 7	275 300		
Cleveland Metropolitan General	R J Nicholl	3	120			5,298	1	2	1	0	= 4	150-217	FM	
St Luke's	G T Schwarz	11	425			4 402	0	1	0	0	= 1	235-275	FM	
University Hospitals of Cleveland	I V Johnson	16	711	2	100	8 030	3	3	3	0	= 9	150 250	PM	
Veterans Admin [311]	L V Johnson	15	288			209	1	1	1	0	= 3	271 462	PM	
Columbus														
Ohio State University Hospital University	W D Havener	9	476			8 580	4	0	4	4	= 12	177 277	PM	
OKLAHOMA														
Oklahoma City														
University of Oklahoma Medical Center University Hospitals	I R Reed	8	344	2		4 292	2	2	0	0	= 4	200 225	PM	2

Numerical and other references are listed on pages 811 through 814

14 OPHTHALMOLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O	Length of Approved Program (Years)
OREGON														
Portland														
University of Oregon Medical School Hospitals and Clinics [323]	K C Swan	26	619			10,641	2	2	2	0	= 6	165 215	FM	3
PENNSYLVANIA														
Danville														
George F Geisinger Memorial	A W Mahood	3	186			6 598	1	1	1	0	= 3	185 225		3
Philadelphia														
Graduate Hospital of the University of Pennsylvania [329]	I H Leopold	22	797	2		3,117	2	2	2	0	= 6	75-100	FM	3
Hospital of the University of Pennsylvania	F H Adler	24	968			5 211	4	4	4	0	= 12	100 200		3
Jefferson Medical College	C R Mullen	14	377			3,951	3	2	0	0	= 5	100 150	PM	3
Philadelphia General	G Gibson H Scheie	9	174	2	50	8 201	2	2	2	0	= 6	128 265	FM	3
Temple University [337]	G G Gibson	20	366			3,673	2	2	2	0	= 6	175 225	PM	3
Wills Eye		181	3 351			101 505	7	7	0	0	= 14	100 100	FM	5
Pittsburgh														
Health Center Hospitals of the University of Pittsburgh School of Medicine Eye and Ear	M F McCaslin	66	2 920	3	100	13 803	2	2	2	0	= 6	125 175	FM	3
Montefiore	H F Thorpe	20	584	1	100	2 615	1	1	1	0	= 3	225 275	FM	3
Veterans Admin	R N Lehman	18	335				2	1	2	0	= 5	270 347	O	3
PUERTO RICO														
San Juan														
University of Puerto Rico Affiliated Hospitals San Juan City University (Caparra Heights)	G Pico	17	437			11 916	0	2	2	0	= 4	250 325		3
SOUTH CAROLINA														
Charleston														
Teaching Hospitals of the Medical College of South Carolina Medical College Roper	P G Jenkins	6	269	1	100	2 337	1	0	0	0	= 1	138 168	FM	3
TENNESSEE														
Chattanooga														
Baroness Erlanger														3
Memphis														
City of Memphis Hospitals— Memphis Eye Ear Nose and Throat	P M Lewis	29	1 961	3		14 491	4	1	1	0	= 6	150 200	FP	3
Veterans Admin	A C Krause	19	192			9 701	1	1	1	0	= 3	271 347	PM	3
Nashville														
Vanderbilt University	G W Bounds	15	628			1,913	1	1	1	0	= 3	100 125	FM	3
TEXAS														
Dallas														
Parkland Memorial	C Browning	11	492	1		7 434	2	2	2	0	= 6	150 200	PM	3
Veterans Admin [360]	S B Gostin	20	240	2	100	3 200	1	2	0	0	= 3	271 347	PM	3
Galveston														
University of Texas Medical Branch Hospitals	G Robertson	13	403			5 338	1	1	1	0	= 3	160 160	FP	3
Houston														
Baylor University College of Medicine Affiliated Hospitals														3
Jefferson Davis	L Girard	8	182			7,904	2	1	2	0	= 5	125 165	FM	
Veterans Admin	L J Girard	14	372	1	100		2	2	2	0	= 6	270 347	PM	
Hermann	T L Royce	13	953	1	100	2 669	1	1	1	0	= 3	125 175	FM	3
San Antonio														
Robert B Green Memorial	J L Mims F X Weixel	3	137			4,118	1	0	1	0	= 2	150 300	FM	3
Temple														
Scott and White Memorial	F R Veirs	5	421				1	0	0	0	= 1	300-300	O	5
VIRGINIA														
Charlottesville														
University of Virginia	E W Burton	10	400			3 998	1	1	2	0	= 4	75 150	FM	3
Richmond														
Medical College of Virginia— Hospital Division	D Guerry III	11	413	1		7 329	1	1	1	0	= 3	100 150	FM	3
Veterans Admin	E W Perkins	12	144	5	60	1 967	1	1	1	0	= 3	271-412	PM	3
Roanoke														
Gill Memorial Eye Ear and Throat	E G Gill	14	2 022			27 419	1	1	0	0	= 2	300 300	PM	3
WASHINGTON														
Seattle														
King County Hospital Unit No 1 (Harborview)	R C Laughlin	3	547#	1	100	4,686	0	1	1	0	= 2	200 275	FM	5
WISCONSIN														
Madison														
University Hospitals	P Duehr	17	719	1	100	2,637	1	3	1	0	= 5	100 200	FM	3
Milwaukee														
Milwaukee County	E F Carl	10	255	1		10 542	2	2	2	0	= 6	229 334		3
Veterans Admin (Wood)[388]	R H Lehman	15	309	10	80	10,371	2	1	0	0	= 3	271 347	PM	3

Numerical and other references are listed on pages 811 through 814

15 ORTHOPEDIC SURGERY

Type of training acceptable to Board A—Adult Orthopedics C—Children s Orthopedics F—Fractures Residency programs in the following hospitals have been approved by the Council and the American Board of Orthopedic Surgery, through the Residency Review Committee for Orthopedic Surgery as offering acceptable training in adult orthopedics children s orthopedics and fractures Training in the basic sciences is given either as an integral part of these services or as a separate course Services collaborating in an integral plan of training as designated by a program number a list of which is found on pages 732 and 733
Residents completing their training in these hospitals are eligible for full certification by the American Board of Orthopedic Surgery including children s orthopedic surgery

Hospitals 278 Residencies 1 295

	Chief of Service or Program Director	Type of Training	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min	Max	Maintenance
UNITED STATES AIR FORCE																
TEXAS																
U S Air Force San Antonio	E W Brannon	ACF		122	1 785#	3	100	13 436	2	2	2	2	= 8			
UNITED STATES ARMY																
CALIFORNIA																
Letterman General San Francisco	L W Taylor	AF	40	159	2 295	1	100	6 769	2	2	2	0	= 6			
COLORADO																
Fitzsimons General Denver	I O Irwi	AF	65	96	745			7 446	1	1	1	0	= 3			
DISTRICT OF COLUMBIA																
Walter Reed General Washington	J D Blair	ACF		194	1 982	14	79	10 351	2	2	2	0	= 6			
HAWAII																
Tripler Army Honolulu	E C Fineberger	ACF		121	2 423	3	67		4*	2	2	0	= 8			
TEXAS																
William Beaumont General El Paso	J F Brennan	AF	96	133	1 757	3	100	1 883	1	1	1	0	= 3	394 565		PM
Brooke General San Antonio	H S McBurney	ACF		135	1 417	3	67	9 558	2	2	2	0	= 6			
UNITED STATES NAVY																
MARYLAND																
U S Naval Bethesda	J H Cheffey	AF	20	105	887	1	100	7 238	2	1	2	0	= 5			
PENNSYLVANIA																
U S Naval Philadelphia	W D Bundens Jr	AF	62	165	1 005	11	72	7 241	1	2	2	0	= 5			
UNITED STATES PUBLIC HEALTH SERVICE																
CALIFORNIA																
U S Public Health Service San Francisco	C B Vaughan Jr	AF	87	75	1 056	2		9 708	1	1	1	1	= 4			
NONFEDERAL AND VETERANS ADMINISTRATION																
ALABAMA																
Birmingham																
University of Alabama Medical Center Crippled Children s	J D Sherrill	C	44 68 75	79	689	2	50	5 085	0	0	2	2	= 4	200 325		FP
University Hospital and Hillman Clinic	J S Sherrill Sr	ACF	44	152	2 424	19	31	8 495	3	3	3	3	= 12	190-250		FM
Veterans Admin	J M Higginbotham	AF	44	22	262	2	50	472	1	1	1	0	= 3	293-412		O
Fairfield																
Lloyd Noland [a]	C L Yelton	AF	68	29	1 080	4	75	16 196	1	1	1	1	= 4	250-375		FM
Mobile																
Mobile General	A R Earl	ACF			601	6	50	2 440	2*	0	0	0	= 2	300-600		PM
ARKANSAS																
Little Rock																
Arkansas Children s	J D Christian	C	94	17	481			2 000	0	0	0	2	= 2	386		PM
University	D M Street	AF	94	11	569	11	3	2 595	2	2	2	0	= 6	170 237		O
Veterans Admin	D M Street	AF	94	35	478	6	83	563	1	1	0	0	= 2	254 347		O
CALIFORNIA																
Long Beach																
Veterans Admin	R H Hutchinson	AF	64	42	290	3	100	1 725	1	1	1	1	= 4	271 462		O
Los Angeles																
Children s	S Mathews	C	64	21	619	1	100	4 820	0	1	0	0	= 1	275 275		PM
Los Angeles County [a]	F M McKeever A Neufeld	ACF	966	a 184	264	31	8 835	6	6	6	6	= 24	273 319		PM
Orthopaedic	J V Luck	ACF	14 79 90	65	2 903	3	67	47 251	2	2	5	0	= 9	200 275		PM
Shriners Hospital for Crippled Children	G W Wetin	C	1 3 90	61	268			2 257	0	0	2	0	= 2	200 200		FM
University of California	C O Bechtol	A	90	20	583	7	28	4 912	0	1	1	1	= 3	240-314		FPO
Veterans Admin	R Mazet Jr	AF	90	83	1 108	19	63	1 881	0	3	3	3	= 9	293-463		PM
White Memorial [a]	I G Reynolds	AF	14	23	831	7	100	5 906	1	3	1	0	= 5	215 235		PM
Oakland																
Children s Hospital of the East Bay	B W Smart	C	2	9	370	1	100		1	0	0	0	= 1			
Highland Alameda County	D D Dickson	AF	1 3	53	1 017	49	22	7 340	2	–	0	0	= 4	200 295		FM
Samuel Merritt	E G Ewer	AF	2	37	1 497#	6	17	4 465						200-295		O
San Francisco																
Children s	L J Larsen	C	2		1 034	5	20	1 134	0	0	2	0	= 2	250-300		FP
Franklin	E R Schottstaedt	A	2	46	1 324	6	33	7 924	0	0	2	0	= 2	200-300		FM
Presbyterian Medical Center	D King	AF	1	18	773	2		3 694	1	1	1	0	= 3	100-175		PM
St Mary s	J J Loutzenheiser	AF	79	32	797	5	80	306	1	1	0	0	= 2	200-300		FP
San Francisco General University of California Service	R K Ashley	AF	2	49	705	135	5	4 617	2	0	1	0	= 3	220-350		O
Shriners Hospital for Crippled Children	E R Schottstaedt	C	2 40	61	321	1	100	3 448	0	0	2	0	= 2	275-275		PM
University of California	V T Inman	A	2	28	654	1	100	5 921	1	1	2	1	= 5	243-316		
Veterans Admin	V T Inman D E King	AF	2 3	31	245	3	33	797	1	1	1	0	= 3	271 462		O
Torrance																
Harbor General	J R Glessner	AF	90	39	610#	65	50	14 073	1	1	1	1	= 4	273 319		FM

Numerical and other references are listed on pages 811 through 814

15 ORTHOPEDIC SURGERY—Continued

	Chief of Service or Program Director	Type of Training	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Maintenance FM PM 0
COLORADO															
Denver															
Children's	H I Barnard	C	4 65	12	752	1		3 765	0	2	0	0	= 2	200 225	PM
University of Colorado Medical Center															
Colorado General	J S Miles	AF	4	17	518	5	60	3,088	2	2	2	2	= 8	180-205	0
Denver General	J S Miles	AF	4	29	664#	28	57	5 323						179 205	
Veterans Admin	M I Gibbens	AF	4	35	554	5	100		1	1	1	0	= 3	271 412	0
CONNECTICUT															
New Haven															
Yale New Haven Medical Center															
Grace New Haven Community	W O Southwick	AF	5	43	1,114	11	36	4 580	0	2	0	1	= 3	75-125	FM
Hospital of St Raphael	W S Perham	AF	43	18	531	13	38	1,657	2	2	2	0	= 6	300-335	PM
Newington															
Newington-Home and Hospital for Crippled Children	B H Curtis	C	5,82	103	481			16,001	0	0	1	0	= 1	100 200	FP
DELAWARE															
Wilmington															
Alfred I Du Pont Institute of the Nemours Foundation	A R Shands Jr	C	20, 62	56	224			3,379	0	2	0	0	= 2	150 250	FM
DISTRICT OF COLUMBIA															
Washington															
Children's	W J Tobin	C	54	14	226			2,142						225 225	FM
District of Columbia General	M Cobey	ACF		41	657	19	31	5,632	2	3	1	0	= 6	233 283	0
Washington Hospital Center	J S Nevlaser	AF	54	62	1,506	10	50	2 878	1	1	1	0	= 3	215-245	FP
FLORIDA															
Miami															
Jackson Memorial	W F Miller	AF	76		1 616	45	36	6 039	3	3	3	0	= 9	225-335	PM
Variety Children's	R P Keiser	C	76		459										
Orlando															
Orange Memorial	N C McCollough	ACF		40	2 319	13	63		1	1	1	1	= 4	325 400	0
St Petersburg															
American Legion Hospital for Crippled Children	C I Farrington	C	78	41	708	10	90	5 509	0	0	1	0	= 1	150 150	FM
Tampa															
Tampa General	A A Wilson	ACF	78		1,058	12	33	3,261	1	1	1	0	= 3	250 300	FM
GEORGIA															
Atlanta															
Emory University	R P Kelly	A	39	16	540#	4			0	3	0	0	= 3	235 245	PM
Georgia Baptist	W W Lovell	AF	86	58	1,424	8	63	224							
Grady Memorial	R P Kelly	ACF	39	39	847	40	12	11 984	3	3	3	0	= 9	125 200	FM
Augusta															
Medical College of Georgia Hospitals	I Bliven	AF	86	19	819	3	100	1,070	0	2	0	3	= 5	316 382	0
Eugene Talmadge Memorial	J L Chandler	ACF	86	23	783	8	38	1 190	1	1	1	0	= 3	200 250	0
University															
HAWAII															
Honolulu															
Shriners Hospital for Crippled Children	I I Larsen	C	50	30	187			8 349	0	0	1	0	= 1		
ILLINOIS															
Chicago															
Michael Reese	J G Finder	AC	42	47	1 331	8	38	3 340	1	1	1	0	= 3	125-175	FP
Northwestern University Medical Center—Cook County Hospital	F L Compere	ACF	7	59	1 593	11	45	2 077	2	2	0	0	= 4	125 200	FM
Chicago Wesley Memorial	F Shapiro	ACF	7	72	819	7	50	11 469	2	2	2	0	= 6	140-140	FM
Cook County	J K Stack	A	7	26	1 480	7	71						= 1	225 275	PM
Passavant Memorial	J J Callahan	AF	7	37	961	29	14	911	1	0	0	0	= 1	250 275	FP
St Anne's	F L Compere	AF	7	19	276	4	50		1	0	1	0	= 2	271 462	0
Veterans Admin Research	N C Mead	AF	7	38	1 259	7	14	895	1	1	0	0	= 2	225 275	PM
Evanston (Evanston)	J J Fahey	AF	7	43	976	6	33	4 393	2	1	0	0	= 3	260 270	FM
St Francis (Evanston)	R D Ray	AF	47	50	440	2		1,229						125-200	FM
Presbyterian-St Luke's	C S Scuderi	F	42	33	1 203	3		1,910	1	0	0	0	= 1	200 200	FM
St Elizabeth's															
Shriners Hospital for Crippled Children	H A Sofield	C	50	65	235			3 680	0	0	0	4	= 4		FM
University of Chicago Clinics	C H Hatcher	ACF		39	833	6	83	5 690	1	1	1	1	= 4	250-350	0
University of Illinois Research and Educational Hospitals	R D Ray	ACF	17	90	1 259	17	70	11 268	3	3	3	3	= 12	160 245	PM
Evanston															
Evanston—See Northwestern Medical Center Chicago															
St Francis—See Northwestern Medical Center, Chicago															
Hines															
Veterans Admin	H Sofield	AF	50	124	820	16	38	3,102	4	4	4	4	= 16	271-412	0
Oak Park															
West Suburban	H A Sofield	AF	50	85	1 008	9	22	3,826	1	0	0	0	= 1	225-225	FM
Peoria															
St Francis	H L Cooper, Sr	ACF		74	1 965	21	24	190	1	1	1	0	= 3	250-275	PM
INDIANA															
Indianapolis															
Indiana University Medical Center	G J Garceau	ACF	8	45	839	10	60	6,215	4	4	4	0	= 12	225-300	PM
Marion County General	H Williams	AF	8	47	632	16	38	5,362	1	1	1	1	= 4	269-315	PM
St Vincent's	G Garceau	AF	8	35	1,222	11	27	141	1	1	0	0	= 2	275-425	PM
Veterans Admin	G J Garceau	AF	8										= 2	271 462	0

Numerical and other references are listed on pages 811 through 814

15 ORTHOPEDIC SURGERY—Continued

	Chief of Service or Program Director	Type of Training	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min	Max	Main Maintenance
IOWA																
Des Moines																
Veterans Administration	D N Gibson	AF	50	45	1 544	8	88	791	1	0	0	0	= 1	271-412		PM
Iowa City																
State University of Iowa Hospitals	C B Larson	ACF	50	82	2 470	29	48	10 996	4	4	4	0	= 12	200-255		FM
KANSAS																
Kansas City																
University of Kansas Medical Center	L Peltier	ACF		23	733	12	50	4 162	1	1	1	0	= 3	125-175		PM
Wichita																
St Francis	W R Miller	ACF		46	1,554	10	20	2 099	1	1	1	1	= 4	275 350		FP
KENTUCKY																
Lexington																
Good Samaritan	K R Thompson	ACF	59	42	1 750	16	25		0	1	0	0	= 1	220-240		FM
St Joseph	T R Miller	ACF	59	27	1 102	6	16	375	1	1	1	0	= 3	220 240		FP
Shriners Hospital for Crippled Children	F D Yocum	C	7	50	242	1		1 195	0	0	0	2	= 2	200-200		PM
Louisville																
Kosair Crippled Children	K A Fischer C Wood	C	9	84	6			5 446	2	1	1	0	= 4	200-200		FM
Louisville General	K A Fischer	AF	9	24	502	33	36	6 851	0	2	1	1	= 4	116 200		FM
Veterans Administration	K A Fischer	AF	9	40	437	3	66	1 437	1	1	0	0	= 2	270-347		O
LOUISIANA																
New Orleans																
Charity Hospital of Louisiana																
Independent Unit	L K Loomis	ACF		25	445	15	53	7 039	2	1	1	0	= 4	125-200		FM
Louisiana State University Unit	I Cohen	ACF		41	1 127	23	26	13 118	5	3	2	0	= 10	125-200		FM
Tulane University Unit	I Wickstrom	ACF	10	43	1 196	30	50	12 724	4	4	2	0	= 10	125 200		FM
Ochsner Foundation [1,9]	H D Morris	ACF	56	21	567	2	100	7 764	1	1	1	1	= 4	225 300		PM
Touro Infirmary	G Berkett	ACF	10 56		1,531	3		1 430	2	2	2	0	= 6	125-175		FP
Veterans Administration	R H Aldredge	AF	10	38	378	2	50	2 504	1	1	1	0	= 3	270-348		O
Shreveport																
Confederate Memorial Medical Center	C R Reed	ACF	70	58	1 358	30	30	4 925	2	2	2	2	= 8	125-300		FM
Shriners Hospital for Crippled Children	B H Young	C	10 70	59	952			1 205	0	0	0	2	= 2	200-200		O
MARYLAND																
Baltimore																
Baltimore City Hospitals	R A Robinson	AF	57	32	379	11	39	3 040	0	0	1	0	= 1	225 225		FP
Children's	C O Eaton	C	57	62	766			1 602								
Jane Lawrence Kernan	A F Voshell	C	88	63	558	1		3 016	0	0	1	1	= 2	250		PM
Johns Hopkins	R A Robinson	AF	57	39	955‡	5	60	8 480	0	3	3	3	= 9	160-227		PM
University	A F Voshell	AF	88	16	233	7	57	4 589	2	2	2	0	= 6	200 250		PM
MASSACHUSETTS																
Boston																
Boston City	A P Aitken	AF	13 66	115	1 729	33	24	8 748	0	0	4	0	= 4	208-208		FM
Children's Medical Center	W I Green	C	11 93	43	1 057			15 670	10	0	5	1	= 16	100-100		FM
Lahey Clinic	G Hammond	A	66	21	501	3		6 219	4	0	0	0	= 4	200-200		O
Massachusetts General	J S Barr	ACF	11					7 837	8	8	4	2	= 22	108-183		FM
Peter Bent Brigham	W I Green	AF	93	Inc in Surg					0	0	0	1	= 1	62 62		FM
Veterans Admin (Jamaica Plain)	A Thibodeau	AF	13	49	847	8	7	2 543	2	2	2	0	= 6			
Canton																
Massachusetts Hospital School	P L Norton	C	13 66	118	190				0	0	0	2	= 2	527 755		O
Middleboro																
Lakeville State Sanatorium	P L Norton	C	13 66	200	481	11	63	203					= 2	122 156		O
Springfield																
Shriners Hospital for Crippled Children	C D Hough Jr	C	66	58	259			3 378	0	2	0	0	= 2	150 200		FM
MICHIGAN																
Ann Arbor																
University [20,9]	C E Badeley	ACF	74	70	1 342	10	70	8 096	0	7	6	6	= 19	215 275		O
Dearborn																
Veterans Admin	A G Goetz	AF	12	40	809	8	63	1 384	0	0	1	0	= 1	270-347		O
Detroit																
Children's	F Fisher	C	12	8	343			3 347	0	2	0	0	= 2	250-300		FM
Harper [13]	F J Fischer	A	12	32	834‡	3	66	809	2	0	0	0	= 2†	300-300		PM
Henry Ford	C I Mitchell	ACF		41	1 510	7	43	24 739	4	4	4	0	= 12	265-365		PM
Receiving	A Goetz	F	12	24	511	17		6 665	0	0	2	0	= 2	325-400		PM
Eloise																
Wayne County General		F	74													
Grand Rapids																
Blodgett Memorial	C H Frantz	ACF		28	937	22	73	2 340	1	0	0	0	= 1	325-350		FM
St Mary's	G T Aitken	ACF		25	662	13		1 754	1	1	0	0	= 2	320-350		FP
Kalamazoo																
Borgess	H Stryker	ACF		27	917	12	25	2 174	0	1	1	1	= 3	275-305		FP
MINNESOTA																
Minneapolis																
Minneapolis General	M I Nydahl	AF	89	8	190	1		2 935	0	1	0	0	= 1	235-235		FM
Shriners Hospital for Crippled Children	D R Lannin	C	16	54	306			1 200	0	0	2	2	= 4			
University of Minnesota Hospitals [21]	J H Moe	ACF	89	19	426	3		2 617	1	4	1	1	= 7	244 244		
Veterans Administration	E T Evans	AF	16	58	768	1	100	2 368	0	6	1	3	= 10	271-462		O
Rochester																
Mayo Foundation [7]	H H Young	ACF			5 991	28	75		12	12	12	12	= 48	200-333		PM
St Paul																
Gillette State Hospital for Crippled Children	J H Moe	C	16 89	135	881	4	75	17 073						264 264		

Numerical and other references are listed on pages 811 through 814

15 ORTHOPEDIC SURGERY—Continued

	Chief of Service or Program Director	Type of Training	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	FMG Min Max 0
MISSISSIPPI															
Jackson															
Mississippi Baptist	J G Caden, Jr	ACF	73	41	1 379	18	67	4,087	1	1	1	0	= 3	250-250	FM
University	P S Derian	AF	73	12	422#	4	25	1,835	1	1	1	1	= 4	250-300	0
Veterans Admin		AF	73						1	0	0	0	= 1		
MISSOURI															
Columbia															
University of Missouri Medical Center	J I Holmes	ACF	61	16	271	11	73	2,693	1	1	1	1	= 4	200 300	
Kansas City															
Children's Mercy	R H Kiene	C	18		200			3,219	0	1	0	0	= 1	200 200	FM
Kansas City General	T G Pipkin	AF	18	41	518	60	23	7 783	0	1	1	0	= 2	220 330	PM
St Luke's	R H Kiene	ACF	18	55	1 019	12	42	1 231	2	1	0	0	= 3	250-325	FP
Veterans Admin	R I Diveley	AF	18	18	289	1	100						= 2	271 271	0
St Louis															
Barnes	F Reynolds	ACF	60	51	1 439	12	100	3,943	4	4	4	0	= 12	150-150	FM
St Louis City	J O Lottes R Lord	F	46, 60	42	875	53	71	5 421	0	0	2	0	= 2	299	PM
St Mary's Group of Hospitals of St Louis University	R M O Brien	ACF	46	46	1 382	19	43	4,517	2	2	2	0	= 6	150 170	FM
Shriners Hospital for Crippled Children	G L Scheer	C	60	86	461			4 861	0	0	3	0	= 3		FM
Veterans Admin [234]	O P Hampton Jr	AF	61	37	389	5	20		1	1	1	0	= 3	271 462	0
NEBRASKA															
Lincoln															
Nebraska Orthopedic	F Leal	C	33	58	544	3		1 617	0	1	0	0	= 1	250 250	FM
Veterans Admin	S P Brown	AF	33	41	376	2	50	500	1	1	1	0	= 3	241-347	0
NEW HAMPSHIRE															
Hanover															
Dartmouth Medical School Affiliated Hospitals															
Mary Hitchcock Memorial	O S Staples	AF	82	48	823	7	86	5 764	1	1	1	0	= 3	218 218	
Veterans Admin (White River Jct Vt)	O S Staples	F	82	48	823	7	86	5,764	1	1	1	0	= 3	218 305	
NEW JERSEY															
Long Branch															
Monmouth Medical Center	B M Hallstein	ACF		24	771	3	67	1,046	1	1	1	0	= 3	200 200	FM
Newark															
Martland Medical Center		F	97												
United Hospitals of Newark Hospital for Crippled Children	D Eisenberg H Kessler	AC	67, 97	86	1 875	6	50	6,891	1	1	1	1	= 4	150 225	FM
Orange															
Hospital Center at Orange	H I Hansen	ACF		34	757	1		14,873	1	2	1	0	= 4	225-275	FM
New Jersey Orthopaedic				33	673	16	13	956	1*	0	0	0	= 1	225 275	FM
Orange Memorial															
Paterson															
St Joseph	R R Goldenberg	ACF		44	846	31	50	1,130	1	1	1	0	= 3	200 250	FP
NEW MEXICO															
Truth or Consequences															
Carrie Tingley	W C Edwards	C	4 95, 96	79	325			1,985	2	1	0	0	= 3	200 275	FMO
NEW YORK															
Albany															
Albany	C Campbell	AF	45	35	895#	14	57	1,075	1	1	1	1	= 4	195-275	PM
Buffalo															
Buffalo General	B J Obletz	AF	24	52	932#	20	40	644	2	2	1	1	= 6	175 300	FP
Children's	J D Godfrey	C	24	11	480	2	50	885	0	0	3	0	= 3	175-175	FM
Edward J Meyer Memorial	J P Cole	AF	83	35	957	15	60	1,623	1	1	1	0	= 3	292 335	PM
Veterans Admin	W M Chardack	AF	24		538	7	86		1	1	1	1	= 4	271 347	0
Hempstead															
Meadowbrook	W P Burtels	F	38	69	2,199	84	14	2,653	0	0	4	0	= 4	275-275	FM
Mineola															
Nassau	C F Freese	AF	38	30	1 056	17	29	4,248	1	1	1	0	= 3	325 375	0
New York City															
Bellevue Hospital Center Div IV—New York University Post Graduate Medical School [271]	W A L Thompson	ACF	51	57	425	2		6 850	9	5	9	0	= 23	145 195	
Bronx Municipal Hospital Center	A J Schildhaus	ACF		33	447	21	52	7,406	2	2	2	0	= 6	215 215	FM
Hospital for Joint Diseases	J J Milgram	ACF		162	3 396	12	42	20,478	6	6	6	0	= 18	80 120	FM
Hospital for Special Surgery [275]	T C Thompson	ACF	22	118	2 410	12	50	53 338	4	4	4	2	= 14	160-200	PM
House of St Giles the Cripple	D M Bosworth	C	26 41	30	110			5,540	0	0	3	0	= 3	100	FM
Jewish Chronic Disease	M Schneider	C	84	21	209	11		1,022	0	1	1	0	= 2	200-250	FM
Jewish Hospital of Brooklyn	A Kenin	AF	84		425	15	7	4 150	1	1	1	0	= 3	100-175	FM
Kings County Hospital Center [281]	R Warren	ACF		67	743	10	8	13 174	2	2	2	0	= 6	145-195	
Metropolitan	M J Wilson	AF	67	69	722	41	24	12 112	3	2	0	0	= 5	145-195	FM
Mount Sinai	R K Lippmann	ACF		27	431	12	25	4 282	1	1	1	1	= 4	100-100	FM
New York Polyclinic Medical School and Hospital	D M Bosworth	F	26	12	270	4	25	2,323	1	1	1	0	= 3	150-150	FM
Presbyterian (New York Orthopaedic Dispensary and Hospital)	F I Stinchfield	ACF		80	1 802	11	27	41,485	6	6	10	2	= 24	267 300	PM
St Charles	D J Magilligan	C	52	32	372	1	100	13 841	4	0	0	0	= 4	225-225	PM
St Luke's	F R Thompson	ACF	41	46	775	5	40	5 774	1	1	1	0	= 3	125-175	FM
St Vincent's Hospital of the Borough of Richmond	D M Bosworth	F	26	22	655	14	66	464	1	0	0	0	= 1	240-240	PM
Sea View	D M Bosworth	A	26		166	6	50		3	0	0	0	= 3	145-195	0
Veterans Admin (Bronx) [292]	J C Thompson	AF	22	59	948	10	33	322	2	0	2	0	= 4	293-417	0
Veterans Admin (Brooklyn) [293]	J B Manly	AF	52	78	361	11	18	936	2	2	1	0	= 5	293-417	0
Veterans Admin (Manhattan) [292]	G Truchly	AF	80	69	624	8	38	1 330	0	2	2	2	= 6	271 315	
Port Jefferson															
St Charles	J C Felicetti	C	38 5 43	58	406#	3	67	21 632	0	0	2	0	= 2	225-225	FM

Numerical and other references are listed on pages 811 through 814

15 ORTHOPEDIC SURGERY—Continued

	Chief of Service or Program Director	Type of Training	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961-1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min-Max	Main Maintenance
NEW YORK—Continued															
Rochester															
Rochester General	M L Rowe	A	31	21	744	3	100	504						225-225	FM
Strong Memorial Rochester Municipal Hospitals	R B Duthie	ACF	31	44	1 084#	4	75	2 963	0	2	2	2 =	6	166-291	O
Schenectady															
Ellis	W Dunham	ACF		46	1 613	13	46	363	1	1	1	0 =	3	325-400	FP
Syracuse															
State University of New York Upstate Medical Center	C B Miller	ACF	48	115	2 886	20	31	3 125	0	1	1	1 =	3	234 350	O
Hospital of the Good Shepherd		CF	48												
Syracuse Memorial		C	48												
Veterans Admin		A	48	37	281				0	0	1	0 =	1	347 347	
West Haverstraw															
New York State Rehabilitation	I C McCauley	C	51 80	133	401	4	50	2 210				=	4	250-275	FM
NORTH CAROLINA															
Chapel Hill															
North Carolina Memorial	B Raney	ACF	81	12	412	2	50	5 115	2	2	1	0 =	5	200-266	O
Charlotte															
Charlotte Memorial	C R Carr	ACF		17	1 917#	4	50	5 917	1	1	1	1 =	4	295-345	PM
Durham															
Duke University Affiliated Hospitals Duke [201]	I Baker	ACF	19	24	1 114	4	25	4 165	5	5	5	5 =	20	43-200	FM
Veteran Admin	E Chippinger	AF	19	37	412#	2	100		0	1	1	1 =	3	270-462	O
Gastonia															
North Carolina Orthopedic	W M Roberts	C	19 91	142	263			7 221	0	0	0	3 =	3	180	PM
Winston Salem															
North Carolina Baptist	H F Forsyth	AF	77	21	598#	3	33	2 212						166-208	PM
OHIO															
Akron															
Akron City	A I Dasi	AF	1	62	1 701			611	2	2	-	0 =	6	300 375	FP
Akron General	E B Roberts	AF	58	34	1 030	11	45	1,380	1	1	1	1 =	4	300-400	FM
Mary Day Nursery and Children's	D I Minnig	C	15 58	16	1 085			2 787	0	2	1	0 =	3	300-325	FP
Cincinnati															
University of Cincinnati College of Medicine Hospital Group															
Children's	I A Freiberg	C	17												
Cincinnati General	J A Freiberg	AF	17	16	167	5	40	3 201	-	2	2	0 =	6	75-150	FM
Veterans Admin	I A Freiberg	A	17	21	208	2	100	336						271-462	O
Jewish	R Perlman	A	17	39	742	9	44	739	0	1	0	0 =	1	215-	FP
Cleveland															
Cleveland Clinic [202]	I I Kendrick	ACF		23	682	3	67	8,318	2	1	1	0 =	4	275-350	
St Luke's	W H McGaw	ACF		47	1 105	13	31	2 046	1	1	1	1 =	4	200-305	FM
University Hospitals of Cleveland	C H Herndon	ACF	27	63	1 221	4	100	6 376	0	3	3	3 =	9	183-250	PM
Veterans Admin	C H Herndon	A	27	58	729	10	70	610	2	1	1	0 =	4	271 462	PM
Columbus															
Children's	H B Lacey	C	25 98 99	1	608				0	0	3	0 =	3	175-275	PM
Mount Carmel	H B Lacey	AF	25	52	1,316	11	46	306	1	1	0	0 =	2	275-300	FM
Ohio State University Hospitals University Hospitals	W S Smith	AF	99	29	901	4	100	2,211	0	2	2	1 =	5	202 277	PM
White Cross	I D Wilson	AF	98	28	1 014#	4	7		1	1	0	0 =	-	315-340	PM
Toledo															
St Vincent's	A I Berchon	ACF		36	1,244#	22	32	457	1	0	1	0 =	2	275-325	FP
Youngstown															
Youngstown	W D McElroy	AF	71	62	1 455	23	43	487	2	2	2	0 =	6	275-37	FM
OKLAHOMA															
Oklahoma City															
Bone and Joint	E Margo	AF	53	63	2,384	15	27	21 192	1	1	1	1 =	4	275-350	PM
St Anthony	W K West	AF	53	39	1 671	16	19	1 245	0	1	1	0 =	2	300-350	FM
University of Oklahoma Medical Center	D H Donoghue								1	8	1	4 =	14		
University Hospitals		AFC	53	51	1 084	4	25	7 295						200 275	PM
Veterans Admin	W K West	AF	53	30	530	5	60	416							
OREGON															
Portland															
Emanuel	R I Hopkins	AF	28	83	2 537#	9	78		0	2	0	0 =	2	275-285	PM
Shriners Hospital for Crippled Children	L S Lucas	C	28	81	374				0	0	2	0 =	2		
University of Oregon Medical School Hospitals and Clinics	W F Snell	AF	28	203	3 730	30	63	6 500	2	2	2	2 =	8	165-215	FM
Veterans Admin [3 4]	R C Merrifield	AF	91	52	577	-	100	1 106	1	1	2	1 =	5	271 412	PM
PENNSYLVANIA															
Danville															
George F Geisinger Memorial	I F Bunch	AF	6	17	765	7	43	14 770	1	1	1	1 =	4	175-250	FM
Elizabethtown															
State Hospital for Crippled Children	T Outland	C	21 92	153	177			3 224	0	0	3	0 =	3	326-326	FP
Erie															
Hamot	C W Fortune	AFC		63	1 853	29	41	461	1	1	1	1 =	4	250-300	FM
Philadelphia															
Albert Einstein Medical Center	A M Rechtman I Stein	ACF		69	945	6	50	4 404	2	2	2	2 =	8	125-200	FM
Children's	I T Nicholson	C	23 72	12	228	1		3,691	2	0	0	0 =	2	75	FM
Graduate Hospital of the University of Pennsylvania [320]	J T Nicholson	A	23	9	250			2 599	2	2	2	0 =	6	100-100	FM
Hahnemann Medical College and Hospital	F O Geckeler	AF	92	3	920	15	40	4 045	0	2	2	0 =	4	75	FM
Hospital of the University of Pennsylvania	D Grice	ACF		45	977	4	50	5,370	3	2	2	0 =	7	125-200	PM
Jefferson Medical College	A F De Palma	ACF	21	85	1 131	10	60	4 725	-	3	2	2 =	9	100-150	PM
Pennsylvania	J T Nicholson	F	23		341	14	61	3 021						20-20	FM
Philadelphia General	A De Palma A Seifer	ACF		53	945	72	69	9,201	2	2	2	0 =	6	125-250	FM
Shriners Hospital for Crippled Children	I R Moore	C	29	71	228			3,312	0	0	4	0 =	4	125-132	FM
Temple University	I R Moore	AF	29	70	1,509	23	48	3,387	4	4	0	0 =	8	175-200	PM

Numerical and other references are listed on pages 811 through 814

15 ORTHOPEDIC SURGERY—Continued

	Chief of Service or Program Director	Type of Training	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	F M PM O
PENNSYLVANIA—Continued															
Pittsburgh															
Allegheny General	P B Steele I A Heberling	ACF	69, 71, 83	86	2,001	30	33	2,170	1	1	1	1	= 4	300-250	FM
Health Center Hospitals of the University of Pittsburgh School of Medicine															
Children's	A B Ferguson Jr	C	30, 6, 45		849			5,354	0	5	0	0	= 5	150-150	FM
Presbyterian	A B Ferguson	AF	30	76	811	7	57		0	1	2	1	= 4	125-145	FM
Veterans Admin	A B Ferguson	AF	30	86	707	13	69		1	1	1	0	= 3	317 467	0
St Francis General	M S De Roy	A	69	15	643	6	17	517	1	1	0	0	= 2	240-305	FP
Sayre															
Robert Packer	D R Baker	ACF		23	1 067	21	52	8 265	1	1	1	0	= 3	235-325	PM
West Reading															
Reading	I I Morrissey	AF	72		807	22	72	553	1	1	1	1	= 4	295-300	FM
RHODE ISLAND															
Providence															
Rhode Island	K C Burton	ACF		76	1,850	19	11	8,554	2	2	2	2	= 8	175-300	FM
SOUTH CAROLINA															
Charleston															
Teaching Hospitals of the Medical College of South Carolina	I A Siegling	ACF		34	973	18	55	1 512	1	1	1	1	= 4	135 165	FM
Medical College															
Roper															
Columbia															
Columbia Hospital of Richland County	W A Boyd	ACF		50	1,853	12	18		1	1	1	0	= 3	225 310	FP
Greenville															
Greenville General	R Grier	AF	77	77	2,370#	12	25	2 378	0	1	1	1	= 3	300-350	0
Shriners Hospital for Crippled Children	J H Stelling	C	19 77	60	372			4,512	3	0	0	0	= 3	200 250	0
TENNESSEE															
Chattanooga															
Baroness Erlanger	J I Killefer	ACF		62	2,319	23	26	2 351	2	2	1	0	= 5	350-400	FM
Knoxville															
East Tennessee Baptist		AF	85	32	1 299	9	22		2	2	2	0	= 6	200 250	FM
East Tennessee Crippled Children's		C	85												
St Mary's Memorial	R Brashear	AF	85	53	2 221	3	33	107	0	1	0	0	= 1	275-325	FP
University of Tennessee Memorial Research Center and Hospital	G Inge	AI	85	24	809	7	14	1 152	2	2	2	0	= 6	390-310	FM
Memphis															
Campbell Clinic [340]	J S Speed	ACF		65	2 321	10	30	26,018					= 14	75-125	FP
Veterans Admin [341]	W J Moffatt Jr	AF		79	807	5	80	3 161	1	1	1	0	= 3	271-412	PM
Baptist															
Vanderbilt University	J W Hillman	ACF		30	1 060	3	33	2 174	2	2	2	0	= 6	100 125	FM
TEXAS															
Dallas															
Baylor University	M P Knight	A	52	55	2,726	10	33	614	1	1	1	0	= 3	210-250	PM
Parkland Memorial	C I Gregory	AF	32	46	1,631	26	46	5,667	0	2	1	1	= 4	150-225	PM
Texas Scottish Rite Hospital for Crippled Children	B Carrell	C	32	47	620			1 473	1	1	1	0	= 3	150-175	FM
Veterans Admin [361]	V M Bryant	AF	75	56	583	4	75	2,400	2	0	2	1	= 5	271 412	PM
El Paso															
Hotel Dieu Sisters	I W Breck	AF	95	20	802	4	50	778	1	1	0	0	= 2	250-350	FM
Galveston															
University of Texas Medical Branch Hospitals	G W N Rogers Sr	ACF		44	864	12	17	5 587	2	2	2	2	= 8	160 160	FP
Houston															
Baylor University College of Medicine Affiliated Hospitals															
Jefferson Davis	L A Bloom	ACF	19	33	754	22	40	8,128	0	2	1	2	= 5	175 165	FM
Veterans Admin	R W Leonard	AF	19	65	954	8	75		0	2	2	2	= 6	240 415	PM
Hermann	E T Smith	ACF		69	1,903	12	42	4,881	1	1	2	2	= 6	175 300	FM
Temple															
Scott and White Memorial [369]	R A Murray	ACF		19	1 730	3	67		1	1	1	0	= 3	300 300	0
UTAH															
Salt Lake City															
Dr W H Groves Latter Day Saints	S W Allred	AF	63	36	1 542	8	12	839	1	1	2	0	= 4	250 325	FP
Primary Children's	T E Bauman	C	63	21	324	2	50	2,291	0	0	2	0	= 2	200 225	FP
University of Utah Affiliated Hospitals															
Salt Lake County General		ACF	34												
Shriners Hospital for Crippled Children	S S Coleman	ACF	34 87	48	240	3	67	1,626	0	0	0	2	= 2	200 250	0
Veterans Admin	S Coleman	ACF	34						0	1	0	0	= 1	271 467	
VIRGINIA															
Arlington															
National Orthopedic and Rehabilitation		ACF													
Charlottesville															
University of Virginia	J H Allan	ACF		27	773	2	50	5 963	1	1	2	2	= 6	[illegible]	FM
Richmond															
Crippled Children's	J T Tucker	C	35	83	529			800	2	0	0	0	= 2	200-600	
Medical College of Virginia—Hospital Division	M J Hoover	AF	35	71	1,585	28	11	4,988	3	2	2	2	= 9	100 175	FM
Veterans Admin	R D Butterworth	AF	35	37	443	4	25	1,473	1	1	1	0	= 3	271-412	PM
WASHINGTON															
Seattle															
Children's Orthopedic	K D Clawson	C	36, 91	17	712#	1	100	4,260	0	0	1	1	= 2	230-250	PM
King County Hospital Unit No 1 (Harborview)	D K Clawson	AF	36	35	730#	48	42	6,344	0	1	1	1	= 3	200-350	FM
	J J Callahan	A	36		1,904#	17	35	108	1	0	0	0	= 1	300-400	FP
Providence	D K Clawson	A	36			11	100	464	0	0	1	0	= 1	317 347	
Veterans Admin															

Numerical and other references are listed on pages 811 through 814

15 ORTHOPEDIC SURGERY—Continued

	Chief of Service or Program Director	Type of Training	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O
WISCONSIN															
Madison															
University Hospitals	R Burns	ACF		54	1 204	8	38	4 13[illegible]	0	4	0	0	= 4	100 2[illegible]0	FM
Milwaukee															
Columbia	A C Schmidt	AF	3[illegible]	22	427±	2	100		3	3	3	3	= 12	270 4[illegible]	PM
Milwaukee Children's	B I Brewer	C	37	10	518			2 531							
Milwaukee County	I R Rogan	AF	37	28	890	[illegible]0	46	6 4[illegible]0	1	1	1	0	= 3	229 324	
Veterans Admin (Wood) [illegible]	P I Carmichale	AF	37	7[illegible]	1 13	11	8[illegible]	4 129	2	1	1	1	= [illegible]	271 412	PM

Residency programs in the following hospitals have been approved by the Council and the American Board of Orthopedic Surgery through the Residency Review Committee for Orthopedic Surgery as offering acceptable training in adult orthopedics and fractures Training in the basic sciences is given as an integral part of these services or as a separate course Services collaborating in an integral plan of training are designated by a program number a list of which is found on pages 732 and 733

Residents completing three years of training in Adult Orthopedics and Fractures at these hospitals are eligible for limited certification by the American Board of Orthopedic Surgery not to include children's orthopedic surgery

Hospitals 11 Residencies 35

	Chief of Service or Program Director	Type of Training	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O
UNITED STATES NAVY															
CALIFORNIA															
U S Naval Oakland	H A Streit	AF		198	1 687	2	100	12 909	2	2	1	0	= [illegible]		
MASSACHUSETTS															
U S Naval Chelsea	D Goldthwaite	AF		9	964			4 783	1	1	2	0	= [illegible]		
VIRGINIA															
U S Naval Portsmouth	C A Stevenson	AF		272	2 166			20 21[illegible]	2	2	2	0	= 6		
DEPARTMENT OF HEALTH EDUCATION AND WELFARE															
DISTRICT OF COLUMBIA															
Freedmen's Washington	J R Cludden	AF		20	448	[illegible]	20	4 436	0	0	0	1	= 1	308 417	PM
NONFEDERAL AND VETERANS ADMINISTRATION															
CALIFORNIA															
San Diego															
San Diego County General	W F Carpenter	AF		37	498	3[illegible]	33	2 109	1	1	0	0	= 2	300-3[illegible]0	FM
San Francisco															
St Joseph's	R Soto Hall	AF		2[illegible]	940	4	7[illegible]	2 847	1	1	1	0	= 3	2[illegible]0 400	FM
INDIANA															
Indianapolis															
Methodist	D Hudler	AF		7[illegible]	1 691	21	43	[illegible]0	1	1	0	0	= 2	290-3[illegible]0	PM
MASSACHUSETTS															
Worcester															
Worcester City	W Eddy	AF		40	783	1[illegible]	40	1 73[illegible]	1	1	0	0	= 2	27[illegible] 300	
NEW YORK															
New York City															
Queens Hospital Center	A H Lewert	AF		27	32[illegible]	20	61	4 02[illegible]	1	1	1	0	= 3	14[illegible]19[illegible]	
OHIO															
Cleveland															
Mount Sinai	A Kramer	AF		30	991	10	40	2 109	1	1	1	0	= 3	21[illegible] 23[illegible]	FM
PENNSYLVANIA															
Philadelphia															
Veterans Administration	J S Deakin	AF		36	66[illegible]	[illegible]	80		1	1	1	0	= 3	292 402	O

Residency programs in the following hospitals have been approved by the Council and the American Board of Orthopedic Surgery through the Residency Review Committee for Orthopedic Surgery, as offering acceptable training in children's orthopedic surgery as an independent program Some of these services also participate in an integrated program offering full training in all categories of Orthopedic Surgery and are also listed on pages 725 through 731

Hospitals 14 Residencies 16

	Chief of Service or Program Director	Type of Training	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O
NONFEDERAL AND VETERANS ADMINISTRATION															
CALIFORNIA															
Los Angeles															
Children's	S Mathews	C		21	649	1	100	4 820	0	1	0	0	= 1	27[illegible] 27[illegible]	PM

Numerical and other references are listed on pages 811 through 814

15 ORTHODEDIC SURGERY—Continued

	Chief of Service or Program Director	Type of Training	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Maintenance FM PM O
CALIFORNIA—Continued															
Oakland															
Children's Hospital of the East Bay	B W Smart	C		9	370	1	100		1	0	0	0	= 1		
CONNECTICUT															
Newington															
Newington Hospital for Crippled Children	B H Curtis	C		103	481			16 001						100 200	FP
FLORIDA															
Jacksonville															
Hope Haven	F I Fort	C		28	295	1	1	3 788	0	0	1	0	= 1	225 295	PM
St Petersburg															
American Legion Hospital for Crippled Children	C I Farrington	C		41	708	10	90	5 509	0	0	1	0	= 1	150-150	FM
GEORGIA															
Decatur															
Scottish Rite Hospital for Crippled Children	I H Kite	C		38	236			2,987	1	0	0	0	= 1	200-200	
ILLINOIS															
Chicago															
Children's Memorial	C N Pease	C			678			3 898	2*	0	0	0	= 2	100-150	FM
KENTUCKY															
Lexington															
Shriners Hospital for Crippled Children	I D Yocum	C		50	242	1		1 195	0	0	0	2	= 2	200-200	PM
MISSOURI															
Kansas City															
Children's Mercy	R H Kline	C			200			3 219						200-200	FM
St Louis															
Shriners Hospital for Crippled Children	C I Scheer	C		86	464			4 861							
NEW MEXICO															
Truth or Consequences															
Carrie Tingley	W C Edwards	C		79	325			1 985	2	1	0	0	= 3	200-250	FM
UTAH															
Salt Lake City															
Primary Children's	I F Bauman	C		21	324	2	50	2 294	0	0	2	0	= 2	200-250	FP
WASHINGTON															
Spokane															
Shriners Hospital for Crippled Children	N K Brown	C		40	226	1	100	1 337	0	0	0	2	= 2	200 200	FM

ORTHOPEDIC SURGERY—PROGRAM IDENTIFICATION

Program Number	Hospital	Location
1	Shriners Hospital for Crippled Children	Los Angeles
	Highland Alameda County Hospital	Oakland Calif
	Presbyterian Medical Center	San Francisco
2	Children's Hospital of the East Bay	Oakland Calif
	Samuel Merritt Hospital	Oakland Calif
	Veterans Admin Hospital	San Francisco
	Children's Hospital	San Francisco
	Franklin Hospital	San Francisco
	San Francisco General Hospital	San Francisco
	Shriners Hospital for Crippled Children	San Francisco
	University of California Hospital	San Francisco
3	Shriners Hospital for Crippled Children	Los Angeles
	Highland-Alameda County Hospital	Oakland Calif
	Veterans Admin Hospital	San Francisco
4	Children's Hospital	Denver
	Colorado General Hospital	Denver
	Denver General Hospital	Denver
	Carrie Tingley Hospital	Truth or Consequences N Mexico
	Veterans Admin Hospital	Denver
5	Grace New Haven Community Hospital	New Haven Conn
	Newington Home and Hospital for Crippled Children	Newington Conn
	St Charles Hospital	Port Jefferson N Y
6	George F Geisinger Memorial Hospital	Danville, Pa
	Children's Hospital	Pittsburgh
7	Chicago Wesley Memorial Hospital	Chicago
	Cook County Hospital	Chicago
	Passavant Memorial Hospital	Chicago
	St Anne's Hospital	Chicago
	Veterans Admin Research Hospital	Chicago
	Evanston Hospital	Evanston Ill
	St Francis Hospital	Evanston Ill
	Shriners Hospital for Crippled Children	Lexington Ky
	Primary Children's Hospital	Salt Lake City
8	Veterans Admin Hospital	Indianapolis
	Marion County General Hospital	Indianapolis
	Indiana University Medical Center	Indianapolis
	St Vincent's Hospital	Indianapolis
9	Veterans Admin Hospital	Louisville, Ky
	Kosair Crippled Children Hospital	Louisville, Ky
	Louisville General Hospital	Louisville, Ky
10	Veterans Admin Hospital	New Orleans
	Charity Hospital of Louisiana, Tulane University Unit	New Orleans
	Touro Infirmary	New Orleans
	Shriner's Hospital for Crippled Children	Shreveport
11	Children's Hospital	Boston
	Massachusetts General Hospital	Boston
12	Children's Hospital	Detroit
	Harper Hospital	Detroit
	Receiving Hospital	Detroit
	Veterans Administration Hospital	Dearborn Mich
13	Veterans Administration Hospital (Jamaica Plain)	Boston
	Boston City Hospital	Boston
	Massachusetts Hospital School	Canton Mass
	Lakeville State Sanatorium	Middleboro Mass
14	Orthopedic Hospital	Los Angeles Calif
	White Memorial Hospital	Los Angeles Calif
15	Mary Day Nursery and Children's Hospital	Akron Ohio
	Akron City Hospital	Akron Ohio
16	Veterans Admin Hospital	Minneapolis
	Shriners Hospital for Crippled Children	Minneapolis
	Gillette State Hospital for Crippled Children	St Paul
17	Children's Hospital	Cincinnati
	Cincinnati General Hospital	Cincinnati
	Jewish Hospital	Cincinnati
	Veterans Admin Hospital	Cincinnati
18	Children's Mercy Hospital	Kansas City, Mo
	Kansas City General Hospital	Kansas City Mo
	St Luke's Hospital	Kansas City Mo
	Veterans Admin Hospital	Kansas City Mo
19	Duke Hospital	Durham N C
	Veterans Admin Hospital	Durham N C
	North Carolina Orthopaedic Hospital	Gastonia N C
	Shriners Hospital for Crippled Children	Greenville S C
20	Alfred I du Pont Institute of the Nemours Foundation	Wilmington Del
	U S Naval Hospital	Bethesda Md
21	State Hospital for Crippled Children	Elizabethtown Pa
	Jefferson Medical College Hospital	Philadelphia
22	Veterans Admin Hospital (Bronx)	New York City
	Hospital for Special Surgery	New York City
23	Children's Hospital	Philadelphia
	Graduate Hospital of the University of Pennsylvania	Philadelphia
	Pennsylvania Hospital	Philadelphia
24	Veterans Admin Hospital	Buffalo
	Buffalo General Hospital	Buffalo
	Children's Hospital	Buffalo

Numerical and other references are listed on pages 811 through 814

15 ORTHOPEDIC SURGERY—Continued

Program Number	Hospital	Location
25	Children's Hospital	Columbus Ohio
	Mount Carmel Hospital	Columbus Ohio
26	House of St Giles the Cripple	Brooklyn
	New York Polyclinic Medical School and Hospital	New York City
	St Vincent's Hospital	Staten Island N Y
	Seaview Hospital	Staten Island N Y
27	University Hospitals	Cleveland
	Veterans Administration Hospital	Cleveland
28	Emanuel Hospital	Portland Ore
	Shriners Hospital for Crippled Children	Portland Ore
	University of Oregon Medical School Hospitals and Clinics	Portland Ore
29	Shriners Hospital for Crippled Children	Philadelphia
	Temple University Hospital	Philadelphia
30	Children's Hospital	Pittsburgh
	Presbyterian Hospital	Pittsburgh
	Veterans Admin Hospital	Pittsburgh
31	Rochester General Hospital	Rochester N Y
	Strong Memorial Rochester Municipal Hospitals	Rochester N Y
32	Baylor University Hospital	Dallas Texas
	Parkland Memorial Hospital	Dallas Texas
	Texas Scottish Rite Hospital for Crippled Children	Dallas Texas
33	Nebraska Orthopedic Hospital	Lincoln Neb
	Veterans Admin Hospital	Lincoln Neb
34	Veterans Admin Hospital	Salt Lake City
	Salt Lake County General Hospital	Salt Lake City
	Shriners Hospital for Crippled Children	Salt Lake City
35	Veterans Admin Hospital	Richmond Va
	Crippled Children's Hospital	Richmond Va
	Medical College of Virginia—Hospital Div	Richmond Va
36	Children's Orthopedic Hospital	Seattle
	King County Hospital Unit 1 (Harborview)	Seattle
	Providence Hospital	Seattle
	Veterans Admin Hospital	Seattle
37	Columbia Hospital	Milwaukee
	Milwaukee Children's Hospital	Milwaukee
	Milwaukee County Hospital	Milwaukee
	Veterans Admin Hospital (Wood)	Milwaukee
38	Meadowbrook Hospital	Hempstead N Y
	Nassau Hospital	Mineola N Y
	St Charles Hospital	Port Jefferson N Y
39	Grady Memorial Hospital	Atlanta Ga
	Emory University Hospital	Emory University Ga
40	Letterman Army Hospital	San Francisco
	Shriners Hospital for Crippled Children	San Francisco
41	House of St Giles the Cripple	Brooklyn
	St Luke's Hospital	New York City
42	Michael Reese Hospital	Chicago
	St Elizabeth's Hospital	Chicago
43	Hospital of St Raphael	New Haven Conn
	St Charles Hospital	Port Jefferson N Y
44	Veterans Admin Hospital	Birmingham Ala
	Crippled Children's Hospital	Birmingham Ala
	University Hospital and Hillman Clinic	Birmingham Ala
45	Albany Hospital	Albany N Y
	Children's Hospital	Pittsburgh
46	St Louis City Hospital	St Louis
	St Mary's Group of Hospitals of St Louis University	St Louis
47	Presbyterian St Luke's Hospital	Chicago
	University of Illinois Research and Educational Hospital	Chicago
48	State Univ of New York Upstate Medical Center	Syracuse N Y
	Hospital of the Good Shepherd	Syracuse N Y
	Syracuse Memorial Hospital	Syracuse N Y
	Veterans Admin Hospital	Syracuse N Y
49	Veterans Admin Hospital	Houston Texas
	Jefferson Davis Hospital	Houston Texas
50	Veterans Admin Hospital	Hines Ill
	Shriners Hospital for Crippled Children	Chicago
	Shriners Hospital for Crippled Children	Honolulu
	West Suburban Hospital	Oak Park Ill
51	Bellevue Hospital Center Division IV—New York University Postgraduate Med School	New York City
	Rehabilitation Hospital	West Haverstraw N Y
52	Veterans Admin Hospital	Brooklyn
	St Charles Hospital Orthopedic Clinic	Brooklyn
53	Veterans Admin Hospital	Oklahoma City
	Bone and Joint Hospital	Oklahoma City
	St Anthony Hospital	Oklahoma City
	University Hospitals	Oklahoma City
	Mercy Hospital Oklahoma City General Hospital	Oklahoma City
54	Washington Hospital Center	Washington D C
	Children's Hospital	Washington D C
55	Veterans Administration Hospital	Des Moines Ia
	University Hospitals	Iowa City Ia
56	Ochsner Foundation Hospital	New Orleans
	Touro Infirmary	New Orleans
57	Children's Hospital School	Baltimore
	Johns Hopkins Hospital	Baltimore
	Baltimore City Hospital	Baltimore
58	Akron General Hospital	Akron Ohio
	Mary Day Nursery and Children's Hospital	Akron Ohio
59	Good Samaritan Hospital	Lexington Ky
	St Joseph's Hospital	Lexington Ky
60	Barnes Hospital	St Louis
	St Louis City Hospital	St Louis
	Shriners Hospital for Crippled Children	St Louis
61	University of Missouri Medical Center	Columbia Mo
	Veterans Admin Hospital	St Louis
62	Alfred I du Pont Institute of the Nemours Foundation	Wilmington Del
	U S Naval Hospital	Philadelphia
63	Dr W H Groves Latter Day Saints Hospital	Salt Lake City
	Primary Children's Hospital	Salt Lake City
64	Veterans Admin Hospital	Long Beach Calif
	Children's Hospital Center	Los Angeles Calif
65	Children's Hospital	Denver
	Fitzsimons Army Hospital	Denver
66	Boston City Hospital	Boston
	Lahey Clinic	Boston
	Massachusetts Hospital School	Canton Mass
	Shriners Hospital for Crippled Children	Springfield Mass
	Lakeville State Sanatorium	Middleboro Mass
67	Hospital for Crippled Children	Newark N J
	Metropolitan Hospital	New York City
68	Crippled Children's Clinic and Hospital	Birmingham Ala
	Lloyd Noland Hospital	Fairfield Ala
69	Allegheny General Hospital	Pittsburgh
	St Francis General and Rehabilitation Institute	Pittsburgh
70	Confederate Memorial Medical Center	Shreveport La
	Shriners Hospital for Crippled Children	Shreveport La
71	Allegheny General Hospital	Pittsburgh
	Youngstown Hospital	Youngstown Ohio
72	Children's Hospital	Philadelphia
	Reading Hospital	West Reading Pa
73	Mississippi Baptist Hospital	Jackson Miss
	University Hospital	Jackson Miss
	Veterans Admin Hospital	Jackson Miss
74	University Hospital	Ann Arbor Mich
	Wayne County General	Eloise Mich
75	Crippled Children's Hospital	Birmingham Ala
	Veterans Admin Hospital	Dallas Texas
76	Jackson Memorial Hospital	Miami Fla
	Variety Children's Hospital	Miami Fla
77	North Carolina Baptist Hospital	Winston Salem N C
	Shriners Hospital for Crippled Children	Greenville S C
	Greenville General Hospital	Greenville S C
78	Tampa General Hospital	Tampa Fla
	American Legion Hospital for Crippled Children	St Petersburg Fla
79	Orthopaedic Hospital	Los Angeles
	St Mary's Hospital	San Francisco
80	Veterans Admin Hospital (Manhattan)	New York City
	Rehabilitation Hospital	West Haverstraw N Y
81	North Carolina Memorial Hospital	Chapel Hill N C
	North Carolina Orthopedic Hospital	Gastonia N C
82	Newington Home and Hospital	Newington Conn
	Mary Hitchcock Memorial Hospital	Hanover N H
	Veterans Adm Hospital	White River Jct Vt
83	Edward J Meyer Memorial Hospital	Buffalo N Y
	Allegheny General Hospital	Pittsburgh
84	Jewish Chronic Disease Hospital	New York City
	Jewish Hospital of Brooklyn	New York City
85	East Tennessee Baptist Hospital	Knoxville Tenn
	East Tennessee Crippled Children's Hospital	Knoxville Tenn
	St Mary's Memorial Hospital	Knoxville Tenn
	University of Tennessee Memorial Research Center and Hospital	Knoxville Tenn
86	Georgia Baptist Hospital	Atlanta Ga
	Eugene Talmadge Memorial Hospital	Augusta Ga
	University Hospital	Augusta Ga
87	U S Public Health Service Hospital	San Francisco
	Shriners Hospital for Crippled Children	Salt Lake City
88	University Hospital	Baltimore
	James Lawrence Kernan Hospital for Crippled Children	Baltimore
89	Minneapolis General Hospital	Minneapolis
	University of Minnesota Hospitals	Minneapolis
	Gillette State Hospital for Crippled Children	St Paul
90	Shriners Hospital for Crippled Children	Los Angeles
	Veterans Admin Hospital	Los Angeles
	University of California Hospital	Los Angeles
	Orthopedic Hospital	Los Angeles
	Harbor General Hospital	Torrance Calif
91	Veterans Admin Hospital	Portland Ore
	Children's Orthopedic Hospital	Seattle Wash
92	State Hospital for Crippled Children	Elizabethtown Pa
	Hahnemann Medical College Hospital	Philadelphia
93	Children's Medical Center	Boston
	Peter Bent Brigham Hospital	Boston
94	Arkansas Children's Home and Hospital	Little Rock Ark
	University Hospital	Little Rock Ark
	Veterans Admin Hospital	Little Rock Ark
95	Carrie Tingley Hospital for Crippled Children	Truth or Consequences N M
	Hotel Dieu Sisters Hospital	El Paso Texas
96	Carrie Tingley Hospital for Crippled Children	Truth or Consequences N M
	William Beaumont Army Hospital	El Paso Texas
97	Harrison S Martland Medical Center	Newark N J
	Hospital for Crippled Children	Newark N J
98	Children's Hospital	Columbus Ohio
	White Cross Hospital	Columbus Ohio
99	Children's Hospital	Columbus Ohio
	University Hospitals	Columbus Ohio

Numerical and other references are listed on pages 811 through 814

16 OTOLARYNGOLOGY

Residency programs in the following hospitals have been approved by the Council, the American Board of Otolaryngology and the American College of Surgeons, through the Residency Review Committee for Otolaryngology, as offering acceptable training in the specialty

Hospitals, 128, Residencies, 539

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Tenance F M P M O
UNITED STATES ARMY													
COLORADO													
Fitzsimons General Denver	W A Weller	25	732			6 969	1	1	1	0	= 3		
DISTRICT OF COLUMBIA													
Walter Reed General Washington	H S Murphey	57	1,142	5	60	18 247	2	2	2	0	= 6		
TEXAS													
Brooke General San Antonio	F I Spann	21	767	4	75	9 904	2	2	2	0	= 6		
UNITED STATES NAVY													
CALIFORNIA													
U S Naval, Oakland	M Schiff	43	1,015			11 211	1	1	1	0	= 3		
U S Naval, San Diego	F F Wible	79	1 189	9	78	12 367	1	1	1	0	= 3		
MARYLAND													
U S Naval, Bethesda	G W Taylor	30	1 259	3	100	9,363	1	1	1	0	= 3		
PENNSYLVANIA													
U S Naval Philadelphia	W C Livingood	55	839	10	30	5 911	1	2	1	0	= 4		
NONFEDERAL AND VETERANS ADMINISTRATION													
ALABAMA													
Birmingham													
University of Alabama Medical Center													
University Hospital and Hillman Clinic	F S Moody	6	1 274	12	33	3 106	1	1	1	0	= 3	171 199	F M
Veterans Administration	F S Moody	8	355	5	60	121	1	0	1	0	= 2	271 317	O
CALIFORNIA													
Los Angeles													
Los Angeles County [84]	H P House F R House	27	1 419	37	27	21 096	3	3	3	0	= 9	273 303	PM
Los Angeles Eye & Ear [4]	V H Miller	10	1 865			2,997	2	2	0	0	= 4	210 260	PM
University of California	J I Pressman	5	445	4	100	5,700	1	1	1	1	= 4	240-314	FPO
Veterans Admin [86]	C S Mumma	25	642	50	80	3 362	1	1	1	0	= 3†	271 318	PM
White Memorial	C C Gay	10	1,177	1	100	5,291	1	1	1	0	= 3	250-255	PM
Palo Alto													
Stanford Medical Center and Affiliated Hospitals						621	1	1	1	0	= 3	250 325	O
Palo Alto-Stanford Hospital Center	F Shahinian											300 400	F M
Veterans Admin	F Shahinian	1	140			721						270-320	PM
Community (San Mateo)	F Shahinian	4	225	1	100	1 519	0	0	1	0	= 1		
Santa Clara County (San Jose)													
San Francisco													
University of California [100]	F A Soos	6	524	2	100	6 516	2	2	2	2	= 8	243 316	
San Francisco General [9]	G McCoy	18	219	11	27		0	1	0	0	= 1	220 360	O
Veterans Admin [10]	W P Work	16	360	9	56	1 841	1	1	1	0	= 3	271 462	O
COLORADO													
Denver													
University of Colorado Medical Center													
Colorado General	V H Hildyard	64	232	1	100	2 259	1	1	1	0	= 3	180 205	O
Denver General	H I Tuff		350#	4	75	1,441						179 205	
CONNECTICUT													
New Haven													
Yale-New Haven Medical Center	F V Kirchner	13	1 171	7	83	6 000	1	1	1	0	= 3	50-125	F M
Grace-New Haven Community													
DISTRICT OF COLUMBIA													
Washington													
Washington Hospital Center [1 9]	F I Feldman	24	4,167	5	60	13 992	2	2	2	0	= 6	215 215	F P
FLORIDA													
Miami													
Jackson Memorial	F K Chandler		727	7	57	1 563	2	1	1	0	= 4	200 275	PM
Tampa													
Tampa General	F B Farrior		904	3	33	729	1	1	1	0	= 3	250 300	F M
ILLINOIS													
Chicago													
Northwestern University Medical Center						2 942	1	1	0	0	= 2	125 150	F M
Chicago Wesley Memorial	G Shambaugh Jr	16	1 901			26,304	2	1	1	0	= 4	140-140	F M
Cook County	S J Pearlman	38	1 126	63	39	1 793	1	0	0	0	= 1	125 125	F P
Michael Reese [20]	N Teshin	13	1 630	2	50		0	1	1	0	= 2	271 462	O
Veterans Admin Research [-0]	G F Shambaugh	19	264	7	71	3,775	2	1	0	0	= 3	125 150	F M
Presbyterian-St Luke's	S A Friedberg	20	1 083	16	75	9,483	2	1	2	0	= 5	250 305	O
University of Chicago Clinics	J R Lindsay	19	773	27	74								
University of Illinois Hospitals	I I Federer	18	1,320	6	67	26 134	6	4	1	0	= 11	140-215	PM
Illinois Eye and Ear Infirmary		11	664	7	96	12,034	0	2	2	0	= 4	160 215	PM
Research and Educational Hospitals													
Hines													
Veterans Admin [103]	F Federer	26	352	14	43	691	2	0	2	2	= 6	271-412	O
INDIANA													
Indianapolis													
Indiana University Medical Center and Affiliated Hospitals	M W Manion	11	469	9	33	2 093	2	2	2	0	= 6	225-300	PM
Indiana University Medical Center	D Brown	8	443	11	20	4,818	1	1	1	1	= 4	260 318	PM
Marion County General [20]													

Numerical and other references are listed on pages 811 through 814

16 OTOLARYNGOLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Tenance FM PM O
IOWA													
Iowa City													
State University of Iowa Hospitals	D M Lierle	63	3 057	21	67	18 901	5	5	5	0	= 15	200-225	FM
Veterans Admin [29]													
KANSAS													
Kansas City													
University of Kansas Medical Center	G Proud	9	608	1		8 791	1	1	1	0	= 3	125-175	PM
Veterans Admin [29] (Kansas City Mo)	H A Knauff	16	164	8	37						= 1	271 271	O
KENTUCKY													
Louisville													
University of Louisville Medical Center													
Louisville General	W C Wolfe	1	46	2		2 782	0	1	1	0	= 2	141 166	FM
Veterans Admin	H Oppenheim	5	201	5	60	626	1	0	0	0	= 1	270-347	O
LOUISIANA													
New Orleans													
Charity Hospital of Louisiana													
Louisiana State University Unit	V H Fuch	14	1 065	8	25	7 682	2	2	1	0	= 5	125-175	FM
Tulane University Unit	H G Labb	14	982	7	14	7 335	2	2	1	0	= 5	125-175	FM
Eye Ear Nose and Throat	H G Labb	43	691			12 373	5	0	0	0	= 5	100-150	FM
MARYLAND													
Baltimore													
Baltimore Eye Ear and Throat	H C Dix	8	3 759			6 742	1	1	1	0	= 3	150-200	FM
Johns Hopkins	J E Bordley	22	1 575#	4	25	20 035	2	2	2	3	= 9†	160-185	PM
Mercy	J A Schwartz	9	1 943	2		3 874	1	1	0	0	= 2	275 275	PM
University	C L Blanchard	6	343	5	40	6 240	2	2	2	2	= 8	300-350	PM
MASSACHUSETTS													
Boston													
Boston City	A J Gorney	23	1 455	18	11	17 456	0	2	2	2	= 6	158-178	FM
Massachusetts Eye and Ear Infirmary	P E Meltzer		4 439	13	46	25 650	3	0	0	0	= 3	200 200	O
Veterans Admin (Jamaica Plain)	P Mysel	15	316	1	1	1 700	1	1	1	0	= 3		
Beth Israel [29]	B Zonderman						0	1	0	0	= 1	167 250	O
MICHIGAN													
Ann Arbor													
University [05]	J H Maxwell	13	621	2	50	9 041	0	3	3	3	= 9	215-275	O
Detroit													
Harper	A E Hammond	21	3 539#	8	37	1 637	2	2	2	0	= 6	300-350	PM
Henry Ford	J L Dill	15	1 670	4	75	27 415	2	2	2	2	= 8	265-365	PM
Receiving	J E Croushore	9	422	12	54	8 863	0	0	2	0	= 2	325-400	PM
MINNESOTA													
Minneapolis													
University of Minnesota Hospitals	L R Boies	6	570	1	100	5 323	3	3	3	3	= 12	244 244	
Minneapolis General [29]	J H Gieseer	6	368	4	50	2 306	0	1	0	0	= 1	235-235	FM
Ancker [29] (St Paul)	D Kuske	6	394	4	75	4 042	0	0	1	0	= 1	235-235	FM
Veterans Admin [21]	L R Boies	17	528	6	50	3 180	1	1	2	0	= 4	271-462	O
Rochester													
Mayo Foundation [2]	K M Simonton		1 545	2	50		4	4	4	4	= 16	200-333	PM
MISSOURI													
Kansas City													
Veterans Admin—see University of Kansa Medical Center Kansas City Kansas													
St Louis													
Homer G Phillips	J West	13	368	10	40	2 366	1	1	1	0	= 3	235-299	
St Mary's Group of Hospital of St Louis University	B J McMahon	13	1 483			2 855	1	1	1	0	= 3	150-170	FM
Washington University Hospitals [3]													
Barnes	F Walsh	32	3 319	13	69	8 205	4	4	4	4	= 16	75-175	FM
McMillan													
Veterans Admin	F H Lyman	9	138	6	50		0	0	1	0	= 1	271-462	O
NEW JERSEY													
Newark													
United Hospital of Newark													
Newark Eye and Ear Infirmary-Martland Medical Center	E P Cardwell	50	2,315	32	34	5 916	4	2	2	0	= 8	160-213	FM
NEW YORK													
Albany													
Albany [48]	B Volk	10	649#	6	17	1 916	1	1	1	1	= 4	195-275	PM
Buffalo													
Buffalo General [7]	H E Bozer	10	733#	1		937	2	2	0	0	= 4	175-200	FP
New York City													
Bellevue Hospital Center													
Div IV New York University Post Graduate Medical School [05]	J F Daly	85	3 237	34	45	26 524	4	4	4	4	= 16		
Brooklyn Eye and Ear	C R Weeth	94	6,378	5		37 370	2	2	2	0	= 6	100-150	FM
City Hospital at Elmhurst	C A Seelig	10	460	11	60	3 650	2	1	1	0	= 4	145-195	
Harlem Eye and Ear	E Grabscheid	16	2 780	1		22 721	1	1	1	0	= 3	100 200	FM
Kings County Hospital Center	I Polisar	34	1 225	22	23	10,221	2	2	2	0	= 6	145-195	
Long Island College	I A Polisar	[illegible]	914			1 722	1	1	1	1	= 4	164 191	PM
Manhattan Eye Ear and Throat	R J Bellucci	55	6 929	11	27	30 793	3	3	3	0	= 9	100	FM
Mount Sinai	J L Goldman	18	1 673	4	50	7 412	1	1	1	1	= 4	100-100	FM
New York Eye and Ear Infirmary	J S Hanley	31	3 146	2		33 954	4	0	0	0	= 4	50-100	FM
New York	J Moore	19	1,593	2		10 735	1	2	1	1	= 5	164 263	PM
New York Polyclinic Medical School	J W Bell	7	1 054	1	100	5,247	1	1	1	0	= 3	150-200	FM
Presbyterian	E P Fowler	22	1 732	7	57	17 189	3	3	3	0	= 9	250-308	PM
Roosevelt	R C Grove	7	620	1		4,202	1	1	1	0	= 3	158-275	PM
St Lukes	D R McCuaig	13	930	4	25	8 768	1	1	1	0	= 3	125-175	FM
Veterans Admin (Bronx)	H Kolson	21	576	3	33	2,56	1	2	1	0	= 4	270-462	O

Numerical and other references are listed on pages 811 through 814

16 OTOLARYNGOLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961-1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min	Max	Main Maintenance PM O
NEW YORK—Continued														
Rochester														
Strong Memorial-Rochester Municipal Hospitals	C A Heath	9	1,116#			2,061	1	1	1	0 =	3	160	291	O
Syracuse														
State University of New York Upstate Medical Center	A W Doust	19	1 130	4	50	2,418	1	1	1	1 =	4	250	316	O
NORTH CAROLINA														
Chapel Hill														
North Carolina Memorial	N D Fischer	2	112			4 227	1	1	1	1 =	4	200	266	O
Durham														
Duke University Affiliated Hospitals														
Duke	W W Janke	9	818			6 402	2	2	2	2 =	8	43	200	FM
Veterans Admin [29]	R Arnold	9	361#	2	100		1	0	1	0 =	2	270	462	O
McPherson	C B Ferguson	11	1 182	1		15 481	1	1	1	0 =	3	200	350	O
Winston-Salem														
North Carolina Baptist	F A Harrill	10	681#	2	100	1 744						166	208	PM
OHIO														
Cincinnati														
University of Cincinnati College of Medicine Hospital Group														
Cincinnati General	A Fischbach	15	560	8	87	3 960	2	1	0	0 =	3	150	200	FM
Cleveland														
Cleveland Clinic [30]	H L Harris	11	884	2		11 782	2	2	2	0 =	6	275	350	
St Luke's	L W Alexander	21	2 061	11	45	2 122	1	1	1	1 =	4	200	250	FM
University Hospitals of Cleveland	W Maloney	6	1 113			155	0	1	1	1 =	3	183	250	PM
Veterans Admin [29]	W H Maloney	27	139	15	47	375	1	1	1	0 =	3	271	462	PM
Columbus														
Ohio State University Hospitals	L W Harris	11	1 171											
Children's	L W Harris	8	521	4	75	4 339	2	2	2	2 =	8	177	275	PM
University														
OKLAHOMA														
Oklahoma City														
University of Oklahoma Medical Center	L K Linenhiser						1	1	1	0 =	3			
University Hospitals		6	359			3 832						200	275	PM
Veterans Admin		13	193	3	67	259								
OREGON														
Portland														
University of Oregon Medical School Hospitals and Clinics	D D De Weese	16	902	6	67	4 228	2	2	2	2 =	8	165	215	FM
Veterans Admin [31]	T G Van Eyck	6	174			1 128	0	0	1	0 =	1	271	412	PM
PENNSYLVANIA														
Danville														
George F Geisinger Memorial	L W Davison	12	1 193	2	50	10 757	1	1	1	1 =	4	175	250	FM
Philadelphia														
Graduate Hospital of the University of Pennsylvania	B L Ronis	11	1 215	4	25	2 734	2	2	2	0 =	6	100	100	FM
Hospital of the University of Pennsylvania	P Marden	18	1 672	7	43	3 200	2	2	2	2 =	8			PM
Jefferson Medical College [32]	F Harbert	19	1 529	12	17	4 345	1	2	1	0 =	4	100	150	PM
Temple University [33]	D Myers C L Jackson	35	3 193	2		4 038	2	2	2	0 =	6	175	225	PM
Pittsburgh														
Health Center Hospitals of the University of Pittsburgh School of Medicine														
Eye and Ear	F B McCollough	12	520	7	57	5 719	2	3	4	0 =	9	125	175	FM
	K M Day	24	122	25	64		0	1	1	0 =	2	270	347	O
Veterans Admin	F B McCollough	26	2 517	6		2 475	1	1	1	1 =	4	235	310	FM
Mercy Hospital	L A Perrone													
PUERTO RICO														
San Juan														
San Juan City														
RHODE ISLAND														
Providence														
Rhode Island	R W Pearson	18	2 665	7		4 938	1	1	1	0 =	3	125	175	FM
TENNESSEE														
Memphis														
City of Memphis Hospitals [34]	S Sanders		452	9	50	6 926	1	1	1	0 =	3	150	200	FP
Veterans Admin	T C Magnuda	20	80	6	67	4 110	1	1	1	0 =	3	271	347	PM
TEXAS														
Dallas														
Parkland Memorial	C D Winborn	2	98	1		3 192	1	1	0	0 =	2	150	200	PM
Veterans Admin [35]	D A Coghill	12	316	9	89	2 800	2	2	0	0 =	4	293	412	PM
Galveston														
University of Texas Medical Branch Hospitals	J M Robinson	7	403	3	67	5 491	1	1	1	0 =	3	160	160	FP
Houston														
Baylor University College of Medicine Affiliated Hospitals	H H Harris	11	286	5		8 589	1	1	1	0 =	3	125	165	FM
Jefferson Davis	I C Dickson	4	1 099			101	1	0	0	0 =	1	100	175	FM
Methodist	H H Harris	22	359	11	82		1	1	1	0 =	3	270	412	PM
Veterans Admin														
VERMONT														
Burlington														
University of Vermont Affiliated Hospitals	R C Morrow	6	790	2	50	1 210	1	1	1	0 =	3	166	166	O
DeGoesbriand Memorial														
Mary Fletcher														
VIRGINIA														
Charlottesville														
University of Virginia	G S Fitz Hugh	16	1,195	2	50	4 913	2	2	1	0 =	5	75	150	FM
Richmond														
Medical College of Virginia-Hospital Division	P N Pastore	15	1 967	3	33	4 216	2	1	1	0 =	4	100	150	FM
WISCONSIN														
Madison														
University Hospitals	M Bennett	11	1,341	2		2 242	2	2	2	2 =	8	100	250	FM
Milwaukee														
Veterans Admin (Wood) [36]	R H Lehman	19	366	23	61	5 607	1	1	1	0 =	3	271	347	PM

Numerical and other references are listed on pages 811 through 814

17 PATHOLOGY

Residency programs in the following hospitals have been approved by the Council and the American Board of Pathology as offering acceptable training in the specialty Services which have been evaluated on the basis of training in the two categories pathologic anatomy and clinical pathology are designed as follows a—pathologic anatomy only C—clinical pathology only p—pathologic anatomy and clinical pathology

Hospitals 717 Residencies 2823

	Chief of Service or Program Director	Number of Autopsies	Total Number of Laboratory Examinations	Number of Surgical Specimens	Number Examined Microscopically	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Maintenance FM PM O	Length of Approved Program (Years)
UNITED STATES AIR FORCE													
TEXAS													
U S Air Force San Antonio	D Auld	301	469 486	23 221	21 391	1	2	1	2	= 6			4P
UNITED STATES ARMY													
CALIFORNIA													
Letterman General San Francisco	N S Ivy	213	324 849	7 484	7 419	2	2	2	2	= 8			4P
COLORADO													
Fitzsimons General 100 Denver	H F Shuey	141	450 448	5 942	5 942	1	1	1	1	= 4			4P
DISTRICT OF COLUMBIA													
Armed Forces Institute of Pathology Washington	F B Helwig	37,800		35 761	35 761	0	0	10	10	= 20			1A
Walter Reed General Washington	R S Aronson	377	916,305	7 224	7 224	3	3	3	3	= 12			4P
HAWAII													
Tripler Army Honolulu	H B Hoffler	239	653 344	8 124	8 124	1	1	1	1	= 4			4P
TEXAS													
William Beaumont General El Paso	R F Kellenberger	207	699 968	5 015	4 614	1	1	1	1	= 4†	394 565	PM	4P
Brooke General San Antonio	M W Bayless	471	1,395 570	7 181	7 025	2	2	2	2	= 8			4P
WASHINGTON													
Madigan General Tacoma	P W Palmer	166	675 722	3 668	3 668	1	1	1	1	= 4†			4P
UNITED STATES NAVY													
CALIFORNIA													
U S Naval Oakland	H V O Connell	201	458 011	7 134	7 137	1	1		1	= 4			4P
U S Naval San Diego	C I Meador	402	708 656	8 057	8 057	2	1	2	1	= 6			4P
MARYLAND													
U S Naval Bethesda	J S Shaver	311	550 152	26 841	26,841	2	1	2	4	= 9			4P
NEW YORK													
U S Naval New York City	S S Sarkisian	177	448,581	12 701	12 701	1	0	1	2	= 4			4P
PENNSYLVANIA													
U S Naval Philadelphia	B H Smith Jr	203	240 608	3 397	3 397	1	1	1	2	= 5			4P
UNITED STATES PUBLIC HEALTH SERVICE													
LOUISIANA													
U S Public Health Service New Orleans	V I Stedlock	133	197 324	6 507	6 453	1	1	1	1	= 4			3P
MARYLAND													
U S Public Health Service Baltimore	J V Smith	85	188 718	2 719	2 616	1	1	1	1	= 4			4P
National Institutes of Health-Clinical Center Bethesda	C Williams H Stewart	263	319 711	2,576	2,576	4	4	4	0	= 12			4P
NEW YORK													
U S Public Health Service New York City	J I Perrin	129	325 289	4,999	4 003	1	1	1	1	= 4			4P
WASHINGTON													
U S Public Health Service Seattle	B S Eggertsen	167	110,991	3 986	3 719	1	1	0	0	= 2			2P
DEPARTMENT OF HEALTH EDUCATION AND WELFARE													
DISTRICT OF COLUMBIA													
Freedmen's Washington	M V Jackson	211	260 090	4 373	4,373	4	0	0	0	= 4	330-	PM	4P
OTHER FEDERAL													
CANAL ZONE													
Gorgas Balboa Heights	H Mondragon	108	367,246	2,538	2 538	1	1	1	1	= 4	457 593	O	4P
NONFEDERAL AND VETERANS ADMINISTRATION													
ALABAMA													
Birmingham													
Birmingham Baptist	A J Casey	201	520 024	10 235	10 235	1	1	1	1	= 4	300-600	PM	4P
Carraway Methodist	B H Bishop	47	186 288	3 505	3,505	2	0	1	1	= 4	250-350	PM	4P
University of Alabama Medical Center University Hospital and Hillman Clinic	J F A McManus	488	621 911	8 023	8 023	3	2	2	1	= 9	190-250	FM	4P
Veterans Administration	B M Hathaway	161	315 666	2 538	2 538	1	1	0	0	= 2	271 347	O	
Fairfield													
Lloyd Noland	H C Davis	103	175 943	3 677	3 427	1	0	0	0	= 1	250 250	FM	1A
Mobile													
Mobile General	F Brown	522	128 361	5,524		2	2	0	0	= 4	300-450	PM	2A
ARIZONA													
Phoenix													
Good Samaritan	J D Barger	219	197 050	10,225	6,275	1	1	1	1	= 4	350-400	PM	4P
Maricopa County General	N P Crenfell	280	283 462	2 265	2 065	1	1	0	0	= 2	373-292	PM	2A
St Joseph's	J V Stapley	281	204 161	7 726	5 772	1	1	1	1	= 4	350 375	FP	4P
ARKANSAS													
Little Rock													
Arkansas Baptist	F J Wilbur	136	155 215	9 140	6 600	2	2	0	0	= 4	325-400	FM	2A
University	H G Schlumberger	636	260,831	6 167	6 158	2	2	1	1	= 6	170-350	O	4P
Veterans Administration Hospitals Veterans Administration	C F Shukers	207	273,917	2 304	2,304	0	1	0	0	= 1	254 347	O	3P
Veterans Admin (North Little Rock)	J J Frost	309	348 000	2 000	1 850	2	1	1	0	= 4	271 347	PM	

Numerical and other references are listed on pages 811 through 814

17 PATHOLOGY—Continued

	Chief of Service or Program Director	Number of Autopsies	Total Number of Laboratory Examinations	Number of Surgical Specimens	Number Examined Microscopically	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Affiliate FM PM O	Length of Approved Program (Years)
CALIFORNIA													
Bakersfield													
Kern County General	R W Huntington	371	230,033	7 693	3 335	1	1	1	0	= 3	350 425	O	4P
Berkeley													
Herrick Memorial	H R Fishback	155	98,003	3,622	3 063	1	1	1	1	= 4	175 250	FM	4P
Burbank													
St Joseph	R Straus	159	201,650	5,676	5 604	1	1	1	1	= 4	350 550	O	4P
Duarte													
City of Hope Medical Center	G Amromin	210	130,017	3 500	3 500	2	0	0	0	= 2	400-400	O	1P
Glendale													
Glendale Sanitarium and Hospital	A F Brown	211	111,142	5 945	1 302	1	1	1	1	= 4	325-350	PM	4P
Inglewood													
Daniel Freeman Memorial	W B Dublin	138	127,122	5 628	4 220	0	0	0	1	= 1			2P
Loma Linda													
Loma Linda Sanitarium and Hospital	C Hadley	369	232,772	4 861	4,603	2	1	2	1	= 6	315-400	O	4P
Long Beach													
St Mary's Long Beach	J Kiddie	127	178,064	7,595	4 520	1	0	1	0	= 2	300 600	FM	3P
Memorial Hospital of Long Beach	J R Jennings	171	193,073	9,328	7 306	1	1	1	1	= 4	325-475	PM	4P
Veterans Administration [80]	L J Konwaler	588	543,033	3 302	3 302	2	2	2	2	= 8	271-462	O	4P
Los Angeles													
California	A Wright	161	176,104	6,222	4 754	1	1	1	0	= 3	225 275	FP	3A
Cedars of Lebanon	N B Friedman	279	208,773	7 882	7 769	2	2	2	2	= 8	265-400	FM	4P
Childrens	K Cleland D Stowens	282	171,542	972	972	1	1	0	0	= 2	275-275	PM	1A
Hospital of the Good Samaritan	J J Tragerman	181	180,584	6 181	4 359	2	0	0	0	= 2	325 375	FM	4P
Los Angeles County	J Butt	2456	114,659	1 232	1 232	4	4	4	4	= 16	273 319	PM	4P
Mount Sinai		79	118,304	4,002	3 434	1	0	0	0	= 1			1P
Queen of Angels	J Cremin	268	155 299	6,517	5 184	1	1	1	0	= 3	275-325	FM	4P
St Vincent s	J J Kahler	98	178,273#	5 073	4,015	1	0	0	0	= 1	350 350	FM	2P
University of California	S C Madden	398	167 912	4 878	4 369	2	2	2	2	= 8	240-426	FPO	4P
Veterans Administration	B G Fishkin	798	670,096	5,465	5,455	7	4	3	0	= 14	271-413	PM	4P
White Memorial	O B Pratt	287	338,474	5,729	5 729	2	0	1	2	= 5	215-280	PM	4P
Oakland													
Children s Hospital of East Bay	A J McAdams	105	88,715	2 282	450	1	0	0	0	= 1	225 350		1A
Highland-Alameda County	K F Parsons	368	1 6 147	4,855	4,197	1	1	1	1	= 4	200-295	FM	3A
Kaiser Foundation	M Friedman	566	516,372	17,143	14 155	2	1	1	1	= 5	315-520	FM	4P
Samuel Merritt	C P Baker	336	152,832#	6,520	5 642	1	1	1	1	= 4	200 295	O	4P
Veterans Administration	B Gerstl	556	215 951	3,027	3 027	2	2	1	1	= 6	271 462		4P
Orange													
Orange County General	J R Kelly	582	198,000	1 557	1 522	1	1	1	1	= 4	355 395	O	4P
Palo Alto													
Stanford-Medical Center and Affiliated Hospitals													4P
Palo Alto-Stanford Hospital Center	A F Cox	784		7,854	6 097	2	2	1	1	= 6	250 525	O	
Veterans Administration													
Pasadena													
Collis P and Howard Huntington Memorial	D S Shillam R D Lewis	233	251 309	9 522	6 090	2	1	1	1	= 5			4P
Redwood City													
Sequoia	S Lindsay	111	117 954	5 834	4 691	1	0	0	0	= 1	300-	PM	2P
Sacramento													
Mercy	S Friedlander	113	268,214	10 510	6 880	1	1	1	1	= 4	400 600	O	4P
Sacramento County	K Hatcher	502	233 021	3 212	2 791	1	1	1	1	= 4	390 480	FM	4P
San Bernardino													
San Bernardino County Charity	W Scott C Baisinger	297	151 808	6 052	5 027	2	0	0	0	= 2	350	FM	1A
San Diego													
Donald N Sharp Memorial Community	H R Irwin	161	268 269	7 151	5 104	1	0	1	0	= 2	250 250	FM	4P
Mercy	D V De Santo	248	200,991	17,682	11 315	1	1	1	1	= 4	225-325	FP	4P
San Diego County General	J A Palmer	279	145,219	1,810	1 472	1	1	1	1	= 4	250 400	FM	4P
San Francisco													
Children's	S T Neuenberg												2P
French	G Watson	100	88 100	3 052	3 052	1	0	0	0	= 1	250 300	FM	1A
Kaiser Foundation	M J Bassis	230	261 917	8 323	6 883	1	0	1	0	= 2	315 415	FP	3A
Mount Zion	G K Biskind	216	176,452#	4,872	4 868	1	1	1	1	= 4	150 300	FM	4P
Presbyterian Medical Center	R J Kleinhenz	207	109 184	3 986	3 986	1	1	1	1	= 4	100 175	PM	4P
St Francis Memorial	J J Zundell	141	92,749	6 196	4 407	2	0	0	0	= 2	300 350	PM	4P
St Luke's	M B Black	128	135,027	4,087	2 787	2	2	0	0	= 4	325-350	FP	2P
St Mary's	R A Jeffrey	189	167 178	7,369	5 657	1	1	1	1	= 4	200 300	FP	4P
San Francisco General	J L Carr	670	105,481	1 850	1 850	5	6	1	0	= 12	220 360	O	3A
University of California Service													
Southern Pacific General	V L Cull	188	125,803	3 977	2 615	1	0	1	0	= 2	300-400	FM	2P
University of California Hospitals [101]	H D Moon	394	130,122	5,844	5 142	9	7	5	3	= 24	249 426		4P
Veterans Admin	O N Rambo, T V Feichtmeir	209	201 733	3 600	3 600	3	1	1	1	= 6	271-462	O	3P
San Jose													
O'Connor	I R Grams	174	181 981	6 582	5 715	1	1	1	1	= 4	350 500	PM	4P
Santa Clara County	D L Alcott	413	371,062	2 279	2 279	2	1	1	0	= 4	270 320	PM	4P
San Mateo													
Community Hospital of San Mateo County	R O Holmes	704	119 944	2 453		1	0	0	0	= 1	300 400	FM	1A
San Pablo													
Brookside	G H De May C Rolle	130	92 000	1,176	3 596	1	0	0	0	= 1	500 500	O	2P
Santa Barbara													
Santa Barbara Cottage	E L Benjamin	125	113,885	6,013	5 145	1	0	0	1	= 2	200-275	FP	4P
Santa Monica													
St John's	G J Hummer	129	186,539	5 282	5,282	4	0	0	0	= 4	225 250	PM	2A
Stockton													
San Joaquin General	H Schneider	377	154,121	2,941	2 459	1	0	0	0	= 1	275-340	PM	3A
Torrance													
Harbor General	C H Johnston	572	385 010#	3,653	3 219	1	1	1	1	= 4	273 319	FM	4P
COLORADO													
Colorado Springs													
Penrose	J R Kraft	149	115,245#	4,251	3 548	1	1	1	1	= 4	200 200	FM	2A
Denver													
Children's	E C Beatty Jr	123	143,784	3 657	746	1	1	0	0	= 2	225-250	PM	2P
General Rose Memorial	K T Neuhuerger	176	136 967#	6,107	5,180	1	1	1	0	= 3	265-295	FM	2A
Mercy	E Hildebrand	134	88 293	5,864	5 471	2	0	0	0	= 2	300-325	PM	2P
Porter Sanitarium and Hospital	W T Wilke	116	117,747	8 862	8,747	1	0	0	0	= 1	300-600	PM	2P

Numerical and other references are listed on pages 811 through 814

17 PATHOLOGY—Continued

	Chief of Service or Program Director	Number of Autopsies	Total Number of Laboratory Examinations	Number of Surgical Specimens	Number Examined Microscopically	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O	Length of Approved Program (Years)
COLORADO Denver—Continued													
Presbyterian	A F Tubbeneck	177	10,[illegible]8	4,4[illegible]8	3,904	1	1	1	1	= 4	2,5 300	PM	4P
St Anthony	S K Kurland	193	198 84[illegible]	[illegible],811	2,070	2	2	0	0	= 4	275-32[illegible]	FP	2A
St Joseph's	F B McClone	218	334 172	9,0[illegible]	8,930	2	2	2	1	= 7	200 300	FM	4P
St Luke's [111]	W C Black	31	18[illegible] 3,1	10 896	9,90	2	2	1	1	= 6	225 250	PM	4P
University of Colorado Medical Center													
Colorado General	M Berthrong												
	J H Holmes	418	210 360	3,[illegible]86	3,[illegible]13	1	1	1	1	= 4†	250 300	O	4P
Denver General	W C White	880	4,8 109‡	5,321	3,96[illegible]						245 320		4P
Veterans Admin [113]	E H Valentine	290	211 1[illegible]	2,[illegible]	2,[illegible]08	2	2	1	1	= 6	271-412	O	4P
Pueblo													
Colorado State [116]	M Callaman	40[illegible]	138 807	[illegible],040	[illegible],086	4	2	2	2	= 10	275 44[illegible]	FM	4P
CONNECTICUT													
Bridgeport													
Bridgeport	I Akerson	227	332 471	[illegible]00	4,[illegible]3	1	1	1	1	= 4	240 340		4P
St Vincent	A Gindler	217	193 240	4 801	4 174	1	1	1	1	= 4	300-400	PM	4I
Danbury													
Danbury	I Woll	107	105 140	4 814	3 383	2	0	0	0	= 2	200 250	FM	1A
Derby													
Griffin	W P McNulty Jr	86	79 8[illegible]6	[illegible],169	1 735	2	0	0	0	= 2	200 200	FM	1A
Greenwich													
Greenwich	I Morris	178	105 1[illegible]5	4 083	3 199	1	1	0	0	= 2	200 350	FM	2A
Hartford													
Hartford	R Tennant	643	405 992	12 708	12 708	2	2	2	2	= 8	125 282	FP	4P
St Francis	I Hutting	238	250 884	6 785	6 725	1	1	1	1	= 4	175-300	FP	4P
Meriden													
Meriden	R Katzenstein	134	148 108	3 471	2 862	2	0	0	0	= 2	100	FM	2A
Middletown													
Middlesex Memorial	C F McLeod	185	110 997	3 [illegible]	2 396	1	1	0	0	= 2	200 200	FM	2P
New Britain													
New Britain General	P D Robahn	210	915 369	6 915	5 180	1	1	1	1	= 4	250 375	FM	4P
New Haven													
Yale-New Haven Medical Center													
Grace-New Haven Community	A A Hetrow	788	313 [illegible]	9,[illegible]	8,[illegible]2	2	0	1	0	= 3	50 12[illegible]	FM	4P
Veterans Admin (West Haven)	R Yeager	215	252 640	2 [illegible]	2,[illegible]7	1	1	1	0	= 3	270-402		4P
Hospital of St Raphael	R Neff	276	167 746	6 637	5 [illegible]	1	1	1	0	= 3	300-335	PM	4I
Newington													
Veterans Admin	R Olivetti	101	121 103	1 402	1 223	1	0	0	0	= 1	250 347	O	1A
Norwalk													
Norwalk	R N Barnett	199	169 [illegible]	4 687	3 292	1	1	1	1	= 4	195 300	FP	4P
Stamford													
Stamford	F S Breakell	200	169 000	6 936	3 435	1	1	1	1	= 4	200 300	PM	4P
Waterbury													
St Mary's	M F Cox	228	242 237	5 802	3 192	1	1	1	1	= 4	225 275	FP	4P
Waterbury	F O Collins	220	207 912	4 713	4 773	1	1	1	1	= 4	225 300	FM	4P
DELAWARE													
Wilmington													
Delaware	I W Howard	417	330 [illegible]81‡	6 703	6 067	2	1	0	3	= 6	240 280	FP	4P
Memorial	I W Abbott	251	133 431	4 500	4 500	1	1	1	1	= 4	225 [illegible]	FP	4P
Wilmington General	I V Caccitti	5	148 983	5 850	3 830	1	0	0	0	= 1	260-335	FM	1P
DISTRICT OF COLUMBIA													
Washington													
Children	C H Cunn	118	155 165‡	800	795	2	0	0	0	= 2	200 375	PM	2P
District of Columbia General	D Weiss	878	143 661	6 479	6 479	5	2	2	2	= 11	233 308	O	4P
Doctors	O B Hunter Jr	183	253 116	5 715	5 150	1	1	1	1	= 4	200 400	FM	4P
Georgetown University	C I Geschickter	331	301 [illegible]	[illegible] 023	7 023		4	3	1	= 13	175-270	FM	4P
George Washington University	J M Peery	314	29 001	8 4[illegible]1	8 [illegible]0	2	1	1	1	= 5	210 28	PM	4P
Providence	K I McCoy	221	262 [illegible]12	6 316	6 220	1	1	1	1	= 4	350-425	PM	4P
Sibley Memorial	O B Hunter	170	198 309	5 091	4 669	1	1	1	1	= 4	200-400	FM	4P
Veterans Admin [121]	J S Howe	236	201 715‡	1 943	1 973	1	2	1	2	= 6	271 924	O	4P
Washington Hospital Center	V E Martens	507	552 010	11 411	10 843	2	2	1	1	= 6	215-260	FP	4P
FLORIDA													
Coral Gables													
Veterans Admin	R V Thomson	423	242 [illegible]8[illegible]	2 332	2 332	1	1	1	3	= 6	271-420	O	4P
Ft Lauderdale													
Broward General	R F Poppiti	163	210 000	5 750	4 807	2	0	0	0	= 2	300 37[illegible]	FM	4P
Gainesville													
University of Florida Teaching Hospital and Clinics	F I Edwards	108	45 029	1 942	1 942	1	1	1	1	= 4	217 450		3A
Jacksonville													
Baptist Memorial	A C Foraker	1[illegible]	122 [illegible]	5 007	4 569	1	1	1	1	= 4	325 400	O	4P
Duval Medical Center	J W Eversole	201	172 478	4 237	3 841	1	1	0	0	= 2	200 225	FM	2A
St Vincent's	C M Whorton	177	184 099‡	5 024	3 604	0	0	2	1	= 3	325-400	PM	4P
Miami													
Jackson Memorial	W A D Anderson	881	835 711	15 344	12 595	5	5	5	5	= 20	200-335	PM	4P
Miami Beach													
Mount Sinai Hospital of Greater Miami	I Benson	240	214 4[illegible]	3 429	3 115	1	0	3	0	= 4	250 300	FM	4P
Orlando													
Orange Memorial	C C Butt	240	270 838	6 [illegible]36	[illegible]465	1	1	1	0	= 3	325-375	O	4P
Pensacola													
Baptist	G Squire	81	121 406	3 766	2 418	1	1	1	1	= 4	225-600	FM	4P
GEORGIA													
Atlanta													
Crawford W Long Memorial	D Ayer	205	389 265	10 982	7 782	3	2	1	1	= 7	285-300	O	4I
Emory University	W Sheldon	181	176 27[illegible]‡	9 127	7 [illegible]		3	0	0	= 8†	235-[illegible]	PM	4P
Georgia Baptist	C L Forbes	175	166 76[illegible]	14 391	12 147	1	1	0	0	= 2	330-3[illegible]	PM	2P
Grady Memorial	T D Rauen	454	427 247	401	5 401	5	4	1	0	= 10	100 200	FM	4I
St Joseph's Infirmary	I T Godwin	211	212 1[illegible]0	8,[illegible]09	8 [illegible]09	1	1	1	1	= 4†	270 305	PM	4P
Veterans Admin	I Mendeloff	13[illegible]	182 8[illegible]2	1 412	1 370	2	0	0	0	= 2	271-467	PM	3P
Augusta													
Medical College of Georgia Hospitals Eugene Talmadge Memorial	I D Stoddard	2[illegible]8	300 [illegible]4	3 037	3 037	2	2	1	1	= 6	250-383		4P
University	W R Murphy	16[illegible]	192 000	4 [illegible]4	3 819	1	1	0	0	= 2	200 225	O	3A

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17 PATHOLOGY—Continued

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GEORGIA—Continued													
Columbus													
Medical Center	W J Tomlinson	191	113,000	4,868	4,715	1	0	0	0	= 1	275		1A
Savannah													
Memorial Hospital of Chatham County	L Howard Jr	192	96,598	2,293	1,794	1	0	0	0	= 1	350	FM	2A
HAWAII													
Honolulu													
Queen's	H Chin	276	292,687	6,829	6,058	1	1	1	1	= 4	225-375	FM	4P
St Francis	R Chappell	158	160,990	5,629	3,960	1	1	0	0	= 2	250-300		2A
ILLINOIS													
Chicago													
Alexian Brothers Hosp—St Joseph Hosp	G F Stevenson	104	200,681	6,217	5,136								4P
Alexian Brothers						1	0	0	0	= 1	200-100	FM	
St Joseph						1	1	1	1	= 4	300-350	FM	
American	W Eisenstaedt	90	57,456	1,755	1,635	2	0	0	0	= 2	65-115	FM	1P
Augustana	G Miller	183	101,422	3,141	2,865	2	0	0	0	= 2	200-350	FM	4P
Children's Memorial	J Boggs	169	134,621	2,499	2,499	2*	0	0	0	= 2	100-150	FM	2P
Cook County	P B Szanto	2,485	872,306	16,639	16,238	4	4	2	2	= 12	140-140	FM	4P
Edgewater	I Gamboa	159	121,939	6,295	5,397	1	0	0	1	= 2	250-450	FP	4P
Englewood	G T Rich	104	72,734	2,096	1,891	1	0	0	0	= 1	200-200	FM	1A
Grant	J C Sherrick	191	115,388	3,335	2,857	1	1	1	0	= 3	225-275		4P
Illinois Central	W P Mavrelis	131	99,327	3,781	2,740	1	1	0	0	= 2	305-315	FM	2A
Illinois Masonic	L S King	244	255,711	3,653	3,247	1	0	0	0	= 1	175-235	FM	4P
Mercy	G W Changnus	151	1,234	4,219	3,526	1	1	1	1	= 4	225-300	FM	4P
Michael Reese	O Saphir	516	685,619	10,073	8,028	3	2	2	2	= 9	150-250	FP	4P
Mount Sinai	I Davidsohn	208	408,215	7,652	7,160	2	2	2	2	= 8	225-300	PM	4P
Northwestern University Medical Center													
Chicago Wesley Memorial	F C Lampply	247	280,077	7,344	7,340	2	1	1	1	= 5	125-200	FM	4P
Passavant Memorial	W B Wartman	168	222,496	5,245	3,256					= 4	225-275	PM	4P
Veterans Admin Research	D R Brock	266	137,973	2,322	2,322	2	1	1	1	= 5	271-462	O	4P
Evanston (Evanston)	C B Taylor	271	251,133	23,930		2	2	2	2	= 8	225-275	PM	4P
Norwegian American	A Leutner	71	88,325	3,206	1,620	1	0	0	0	= 1	225-225	FM	1A
Presbyterian-St Luke's	G Hass	316		7,521	6,825	3	1	2	4	= 10	125-200	FM	4P
Ravenswood	H Hetz	203	144,923	3,060	3,060	1	0	0	0	= 1	300-300	FM	1A
St Anne's	I B Hartney	156	211,338	4,743	2,951	1	1	1	1	= 4	250-325	FP	4P
St Mary of Nazareth	M C Godwin	164	289,951	4,632	3,698	1	0	0	0	= 1	225-225	FP	1A
Swedish Covenant	I B McCormick	150	140,000	2,700	2,000	1	1	1	1	= 4	280-400	FM	4P
University of Chicago Clinics	R W Wissler	198	568,541	6,198	6,078	2	2	0	0	= 4	250-305	O	4P
University of Illinois Research and Educational Hospitals	C A Krakower	321	721,990	12,153	12,153	3	3	2	2	= 10	200-275	PM	4P
Veterans Admin (West Side)	B Chomet	250	306,473	2,417	2,317	1	2	1	0	= 4	270-412	O	4P
Decatur													
Decatur and Macon County	D C Brosius	160	176,147	6,096	5,059	2	2	0	0	= 4	350-500	PM	4P
Evanston													
St Francis	J W Henry	283	335,120	6,228	4,309	1	1	1	0	= 3	260-290	FM	4P
Hines													
Veterans Admin [101]	M Rubnitz	610	644,423	5,454	5,091	2	2	1	1	= 6	271-462	O	4P
Oak Park													
West Suburban	G Kent												4P
Peoria													
Methodist Hospital of Central Illinois	H I Brown	182	91,672	12,600	5,022	1	0	1	1	= 3	200-375	FP	4P
St Francis	D D Mark	303	171,489	7,750	6,328	1	1	1	1	= 4	225-300	FM	2A
Rockford													
Rockford Memorial	M O Alexander	253	181,893	3,687	3,058	1	1	1	1	= 4	225-225	FM	4P
St Anthony's	A R K Matthews	133	128,776	1,712	1,668	1	1	1	1	= 4	200-300	FM	4P
Urbana													
Carle Memorial	H P Friedman	60	131,593	2,777	2,569	1	0	0	0	= 1	250		1A
INDIANA													
Fort Wayne													
St Joseph's	I A Schneider	222	177,520	6,635	5,803	2	2	2	2	= 8	250-350	PM	4P
Gary													
Methodist	R A Burger W P Loh	275	151,353	4,679	4,557	1	1	1	1	= 4	300-400	FP	4P
Indianapolis													
Indiana University Medical Center													
Indiana University Medical Center Hospitals	E B Smith	442	400,000	5,000	4,990	3	3	3	3	= 12	225-416	PM	4P
Veterans Admin	D Rosenbaum	299	216,260	3,080	3,080					= 3	271-462		3P
Marion County General	P V Evans	591	221,707	2,731	2,664	2	2	2	2	= 8	269-548	PM	4P
Methodist	J H Hoyt	319	688,863	13,220	9,153	2	2	1	1	= 6	278-362	O	4P
St Vincent's	I N Foster	144	167,071	5,990	3,738	1	1	1	1	= 4	275-425	PM	4P
Lafayette													
St Elizabeth	G B Stansell	115	135,790#	4,487	2,975	1	1	0	0	= 2	275-350	FM	2A
Muncie													
Ball Memorial	L G Montgomery	266	264,266	6,987	2,978	1	1	1	1	= 4	250-400	FM	4P
South Bend													
South Bend Medical Foundation Hospitals	C S Culbertson	466	379,514	10,530	10,886	2	2	2	2	= 8	325-325	PM	4P
Elkhart General (Elkhart)													
St Joseph (Mishawaka)													
Memorial													
St Joseph													
Vincennes													
Good Samaritan	B K Black	112	141,106	3,360	2,775	0	0	0	1	= 1			1A
IOWA													
Cedar Rapids													
St Luke's Methodist	R F Looker	173	237,981	6,438	4,453	1	1	1	1	= 4	275-350	FM	3A
Des Moines													
Iowa Methodist	J W Green Jr	217	227,963	6,076	5,131	1	1	0	0	= 2	200-250	FM	4P
Mercy	E C Coleman	213	169,369	4,464	4,442	1	1	1	1	= 4	350-425	PM	4P
Veterans Admin	T E Corcoran	194	164,031	2,418	2,418	1	1	1	1	= 4	271-412	PM	4P
Iowa City													
Mercy		42											1P
State University of Iowa Hospitals	L D Warner	591	425,802	6,706	6,706	3	3	3	3	= 12	300-400	PM	4P
Veterans Admin	K R Cross	199	170,929	2,183	2,074	1	1	1	0	= 3	270-462	PM	3A

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17 PATHOLOGY—Continued

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KANSAS													
Halstead													
Halstead	C A Hellwig	65	103 601	2 314	2 055	1	0	0	0	= 1	300 350	O	1P
Kansas City													
University of Kansas Medical Center	J Carter	381	638 109	17 425	15 939	2	2	6	0	= 10	125 400	PM	4P
Veterans Admin (Kansas City Mo)	J A Turner	224	225 955	2 523	2 304					= 2	271 271	O	2P
Wichita													
St Francis	W P Callahan Jr	982	33 000	8 121	7 931	1	1	1	0	= 3	275 375	FP	3A
Wesley	B F Stofer	216	158 789	7 432	5 702	1	1	1	1	= 4	295 375	FM	4P
Wichita-St Joseph	W J Reals	169	131 419	9 886	8 797	1	1	1	0	= 3	300 350	PM	3P
KENTUCKY													
Covington													
St Elizabeth	R Ritterhoff	164	97 914	3 406	2 026	2	0	0	0	= 2	225-625	FP	2A
Harlan													
Harlan Memorial	D M Kuhn	59	382 087								300		4P
Louisville													
Children	I Diamond	114	59 962#	1 233	818	2	0	0	0	= 2	300 300	FM	1P
Louisville General	W M Christopherson	575	994 167	4 207	3 893	2	2	2	2	= 8	116 200	FM	4P
SS Mary and Elizabeth	H Gordon	101	192 231	5 028	3 940	1	1	0	0	= 2	300 350	PM	2A
Veterans Admin	E I Foote	270	198 183	2 196	2 193	1	1	1	1	= 4	270 347	O	4P
LOUISIANA													
New Orleans													
Charity Hospital of Louisiana	E Moss C Dunlap R Holman	2 132	1 092 071	18 335	18,335	5	4	3	3	= 15	125-200	FM	4P
Hotel Dieu	R Hartwell	99	730 529	8 391	8 391	1	1	1	0	= 3	225 275	FP	3P
Ochsner Foundation	C M Carrera	176	181 824	5 424	5 424	1	1	1	1	= 4	225 300	PM	4P
Southern Baptist	F H Lawson	225	476 646	13 957	13 987	1	1	1	1	= 4	225 275	PM	4P
Touro Infirmary	A Hertzog	271	294 886	7 651	7 651	1	1	1	0	= 3	125-200	FP	4P
Veterans Admin	J Zikind	304	206 867	2 401	2 378	1	1	1	1	= 4	250-412	O	4P
Shreveport													
Confederate Memorial Medical Center	W R Mathews	275	325 537	5 730	5 730	1	1	1	1	= 4	125-300	FM	4P
MAINE													
Bangor													
Eastern Maine General	R C Wadsworth	180	173 629	8 930	7 359	1	1	0	0	= 2	125-188	FM	3A
Lewiston													
Central Maine General	C E Branch	228	98 659	5 370	5 370	1	0	0	0	= 1	175 310	FP	4P
Portland													
Maine Medical Center	J E Porter	257	230 185	5 859	4 506	1	1	1	1	= 4	175 250	FP	4P
MARYLAND													
Baltimore													
Baltimore City Hospitals	A Pollack	437	192 871	3 168	3 168	2	2	1	0	= 5	150 250	FP	3A
Franklin Square	P E Guerin	125	146 895#	3 474	3 474	1	1	0	0	= 2	275 250	FM	2A
John Hopkins	J L Bennett Jr	651	282 969#	6 926	6 926	4	4	4	0	= 12	200 500	PM	3A
Lutheran	J A Wagner	106	133 959	2 938	2 938	1	0	0	0	= 1	220 250	FM	1A
Maryland General	R S Fisher	157	195 734	5 757	5 757	1	1	1	0	= 3	225 250	FM	3P
Mercy	C C Warner	162	529 085	5 764	3 979	1	0	0	0	= 1	275 275	PM	2A
Provident	H E Fenn	114	150 998	2 041	2 025	1	0	0	0	= 1	225 250	FM	1A
St Joseph	W B VandeGrift	180	166 125	4 326	4 175		1	0	0	= 2	275 250	FM	2A
Sinai	J Weinberg	217	331 913	11 637	11 637	2	1	1	1	= 5	150 400	FM	4P
Union Memorial	W C Merkel	217	214 891	9 606	8 560	1	1	1	1	= 4	225 250	FM	4P
University	H I Fitzminger	450	465 800	5 000	9 000	2	2	2	2	= 8	300-400	PM	4P
Bethesda													
Suburban	J E Ash	282	125 141	3 489	2 891	1	1	1	0	= 3	200-300		3P
Cheverly													
Prince Georges General	C Burn	225	215 000	3 540	3 286	2	0	0	0	= 2	200-300	FM	2P
MASSACHUSETTS													
Beverly													
Beverly	R Fienberg	112	101 011	1 972	1 972	2	0	0	0	= 2	300 300	FM	3P
Boston													
Beth Israel	D C Friedman	231	242 961	5 267	5 267	3	2	1	0	= 6	167 250	O	3A
Boston City	G K Mallory	1 089	77 448	6 995	6 859	7	6	3	3	= 19	158 248	FM	4P
Boston Lying in Hospital-Free Hospital for Women													1A
Boston Lying in	K Benirschke	157	71 008	4 665	4 665	4	0	0	0	= 4	75 125	FM	
Free Hospital for Women	D McKay	21	40 446	5 522	5 522	2	0	0	0	= 2	75-150	FM	
Carney	H J Christian	184	212 968	5 483	4 858	1	1	1	1	= 4	175 225	FP	4P
Children Medical Center	S Farber	365	113 000	2 201	2 201	2	1	0	0	= 3		FM	2P
Faulkner	P M Le Compte	108		3 139	3 000	1	0	0	0	= 1	200-225	FM	1P
Lemuel Shattuck	C W Curtis	201	141 000	754	754	1	1	0	0	= 3	262 262	PM	2A
Massachusetts General	B Cardeman	872	12 227	10 002	10 002	4	2	5	0	= 11	108-183	FM	4P
Massachusetts Memorial Hospitals	S C Sommer	125	135 725	4 336	4,336	4	0	0	0	= 4	175 275	O	4P
New England Center	H E MacMahon	186	254 650	3 534	3 440	0	2	2	0	= 4	237 304	O	2A
New England Deaconess	S Warren	214	290 814	7 519	7 519	4	4	4	3	= 15	200-350	PM	4P
Peter Bent Brigham	C J Dammin	370	164 509	3 074	3 074	3	2	2	0	= 7	42 167	FM	4P
St Elizabeth's	J H Graham	199	153 031	7 874	5 758	1	1	0	0	= 2	175-200	FM	3A
Veterans Admin (Jamaica Plains)	J D Houghton	425	520 764	4 415	4 400	3	3	0	0	= 6			3A
Cambridge													
Cambridge City	S B Burke	100	57 581	2 278	2 058	1	1	0	0	= 2	170-195	FM	2A
Mount Auburn	H E MacMahon	175	149 864	3 412	3 412	1	1	0	0	= 2	150 190	FM	2A
Fall River													
Truedale	W Freeman	84	102 193	2 918	2 154	1	0	0	0	= 1	175 200	FM	1A
Fitchburg													
Burbank	H J Sparling	115	142 344	3 625	3 625	1	1	0	0	= 2	200 250	FM	2A
Framingham													
Framingham Union	C G Tedeschi	160	169 500	5 757	3 116	1	1	0	0	= 2	200 275	FP	2A
Holyoke													
Holyoke	H P Wakefield	140	86 413	3 457	2 678	1	0	0	0	= 1	100 100	FM	1A
Lawrence													
Lawrence General	L S Jolliffe	192	113 291	1 635	1 559	1	1	1	1	= 4	250-325	FM	4P
Lynn													
Lynn	H Olken	151	149 419	5 601	5 601	2	0	0	0	= 2	150-150	FM	2P

Numerical and other references are listed on pages 811 through 814

17 PATHOLOGY—Continued

	Chief of Service or Program Director	Number of Autopsies	Total Number of Laboratory Examinations	Number of Surgical Specimens	Number Examined Microscopically	Residencies Offered 1961-1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min–Max	Main Affiliation FM PM O	Length of Approved Program (Years)
MASSACHUSETTS—Continued													
Malden													
Malden	M V MacKenzie	97	76,155	3,035	3,035	1	1	0	0	= 2	200-225	FM	3P
New Bedford													
St Luke's	V Kiarsis	216	238,449	5,491	2,973	1	1	0	0	= 2	200	FP	3A
Newton													
Newton-Wellesley	D Skinner	130	169,133	7,804	5,825	1	1	1	0	= 3	200-270	FM	3P
Pittsfield													
Pittsfield General	W Beautyman	69	79,085	3,790	1,871	1	1	0	0	= 2	280		3P
Quincy													
Quincy City	R B Street Jr	133	116,646	3,629	3,629	1	1	1	1	= 4	199-350	FM	4P
Salem													
Salem	D V Nickerson	97	119,400#	2,159	2,159	2	1	1	0	= 4	200-350	FP	4P
Springfield													
Springfield	W Kaufmann	266	244,602	7,844	7,844	1	1	1	0	= 3	175-225	FP	3A
Walpole													
Londville (Norfolk)	S Warren	132	56,655	1,786	1,786	0	0	0	2	= 2	527-627	O	3P
West Roxbury													
Veterans Admin	[illegible] Cole	94	144,167	1,212	1,212	2	1	0	0	= 3	237-375	O	3P
Worcester													
Memorial	K C Sniffen	177	91,873	3,557	2,996	1	1	0	0	= 2	225-250	FM	2A
St Vincent	W Casale	260	131,683	5,985	5,070	2	1	1	0	= 4	200-225	FP	4P
Worcester City	W MacEllivray	293	185,360	3,014	3,014	1	1	1	0	= 3	250-333	PM	4P
MICHIGAN													
Ann Arbor													
St Joseph Mercy	H Bryant	216	205,815	10,832	9,860	1	1	0	0	= 2	310-360	FM	3A
University	A T French	164	171,517	10,331	10,331	[illegible]	[illegible]	[illegible]	5	= 20	180-275	O	4P
Battle Creek													
Leila Y Post Montgomery	A A Humphrey	71	75,657	2,503	1,867	1	0	0	0	= 1	400-525	FM	1A
Detroit													
Children's	W W Zuelzer	194	162,989	16,581	16,581	2	0	0	0	= 2	200-300	FM	1A
Grace	C F Owen	378	369,272	16,110	16,110	1	1	1	1	= 4	275-350	FP	4P
Harper	J K McDonald	282	373,531#	9,211	8,994	2	2	2	2	= 8	275-350	PM	4P
Henry Ford	K C Horn	650	687,870	10,152	10,152	4	4	4	4	= 16	265-365	PM	4P
Mount Carmel Mercy	F W Gardner	287	329,715	8,208	6,846	1	1	1	1	= 4	150-525	PM	4P
Providence	D H Kaump	241	195,653	8,075	6,917	1	1	1	1	= 4	110	PM	4P
Wayne University Affiliated Hospitals													
Oakwood (Dearborn)	R I Mainwaring	133	187,310	4,923	4,746	1	1	1	1	= 4	250-375	FM	4P
Veterans Admin (Dearborn)	J Shrager	321	357,192	3,047	3,047	1	1	1	1	= 4	270-412	O	4P
Detroit Memorial	J D Langston	173	237,768	1,216	3,944	0	1	1	0	= 2	425-500		4P
Herman Kiefer	P C Martineau	238	636,116	1,974	1,974	2	0	0	0	= 2	325-400		2P
Receiving	J Berman	580	664,128	7,276	7,276	0	2	2	0	= 4	325-400	PM	4P
Sinai	S Kobernick	139	184,507	7,488	4,842	1	1	1	1	= 4	300-375	FM	4P
Woman's	J Muirhead J Lutz	226	232,328	5,712	5,712					= 2	475	O	4P
Eloise													
Wayne County General Hospital and Infirmary	S I Gould	495	418,977	7,721	7,721	2	1	2	2	= 7	403-490	FM	4P
Flint													
Hurley	L Knights	351	447,721#	15,450	8,221	1	1	1	1	= 4	325-450	FM	4P
McLaren General	J G Murphy	160	260,944	5,082	3,915	1	1	1	1	= 4	375-450	PM	4P
St Joseph's	W T Eaton	209	279,280	5,801	5,051	1	0	1	0	= 2	425-525	PM	4P
Grand Rapids													
Blodgett Memorial	C A Payne	409	181,235	9,527	9,527	1	0	0	0	= 1	325-350	FM	4P
Butterworth	J D Mann	304	175,874#	6,372	4,371	1	1	1	1	= 4	300-375	PM	4P
St Mary's	H J Bowman	159	210,341	10,360	5,795	2	0	0	0	= 2	320-350	FP	2A
Kalamazoo													
Borgess	F J Martens	161	115,246	4,030	3,150	1	1	0	0	= 2	275-285	FP	2P
Lansing													
Edward W Sparrow	F F Dunkel	151	153,748	6,105	3,613	1	1	1	0	= 3	300-450	FM	3A
Pontiac													
Pontiac General	J J Marra	192	154,337	4,739	3,893	1	1	1	1	= 4	350-450	FP	4P
St Joseph Mercy	R F Olsen	219	144,079	4,328	4,125	1	1	1	1	= 4	375-195	PM	4P
Saginaw													
Saginaw General	R Bucklin	161	126,828	4,483	4,330	1	1	1	1	= 4	365-440	PM	4P
MINNESOTA													
Duluth													
St Luke's	A H Wells	463	250,655	9,781	381	1	1	1	1	= 4	275-350	FP	4P
St Mary's	V C Aufderheide	245	277,503	4,881	4,371	1	1	1	1	= 4	200-200	FM	4P
Minneapolis													
Minneapolis General	J I Coe	404	266,369	4,501	3,915	1	1	1	0	= 3	235-275	FM	3A
Mount Sinai	S S Barron	135	170,000	3,765	2,619	2	0	0	0	= 2	238-238	FP	2A
Northwestern	J H Lott	203	176,059	5,401	4,667	1	1	0	0	= 2	225-250	FP	2A
St Barnabas	N K Lufkin	203	117,706	7,280	6,270	1	0	0	0	= 1	200-200	FM	2A
Swedish	A R Jay					1	3	2	2	= 11	244-244		4P
University of Minnesota Hospitals	G F Evans J R Dawson												
Veterans Admin [21]	D F Clerson	414	155,711	6,918	6,691	2	2	1	0	= 5	275-462	O	4P
Rochester													
Mayo Foundation [2]	D Mathieson A H Baggenstoss	656	1,000,000	27,118	27,118	[illegible]	[illegible]	[illegible]	[illegible]	= 20†	200-333	PM	4P
St Paul													
Ancker	J I Noble	451	263,016	1,726	1,726	1	0	0	0	= 1	235-235	FM	2A
Charles T Miller	J L Edwards	176	256,613#	6,741	5,182	1	1	1	1	= 4	325-375	PM	4P
St Joseph's	J James	151	121,021	4,185	3,703								2A
MISSISSIPPI													
Jackson													
Mississippi Baptist	K M Heard	180	178,401	4,959	4,257	1	0	0	1	= 2	400-400	FM	4P
University	J G Brunson	315		4,138	4,138	4	4	4	4	= 16	250-300	O	4P
MISSOURI													
Clayton													1A
St Louis County	J P Wyatt	226	190,597	1,043	939								3P
Columbia													
University of Missouri Medical Center	J E Flynn	188	137,632	5,831	5,477	4	4	2	1	= 11	200-300		

Numerical and other references are listed on pages 811 through 814

17 PATHOLOGY—Continued

	Chief of Service or Program Director	Number of Autopsies	Total Number of Laboratory Examinations	Number of Surgical Specimens	Number Examined Microscopically	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	FM Main Maintenance FM PM O	Length of Approved Program (Years)
MISSOURI—Continued													
Kansas City													
Kansas City General	C B Wheeler	430	481 310	4 955	3 644	1	1	1	1	= 4	220 320	PM	4P
Menorah Medical Center	H Cohen	153	167 254	7 765	3 834	1	1	1	1	= 4	300-450	FP	4P
Research	H K B Allebach	114	237 934	5 397	3 986	1	1	1	1	= 4	275-350	FP	4P
St Joseph	R W Kerr	134	352 542	6 67	6 400	2	2	1	1	= 6	250-425	FM	4P
St Luke s	F C Helwig	320	329 096	20 687	18 618	2	2	1	1	= 6	250 325	FP	4P
St Mary s	A Lapi	172	198 159	7 558	6 118	1	1	1	1	= 4	350 500	PM	4P
Veterans Admin—See University of Kan as Medical Center Kansas City Kansas													
St Louis													
Barnes	W S Hartroft	600	613 569	16 327	15 525	1	4	4	3	= 12	250 175	FM	3A
De Paul	J D Bauer	205	212 660	5 459	3 753	1	1	1	0	= 3	200-250	FM	4P
Homer G Phillips	J O Blache	387	229 163	4 232	3 950	2	1	1	0	= 4	235 299		2A
Jewish	J Hasson	258	226 515#	5 533		2	1	1	0	= 4	200-300	FM	3A
Missouri Baptist	W R Platt	144	138 086	3 724	3 574	1	1	1	0	= 3	250-350	FM	4P
St John s	H N Allen	221	147 575#	4 815	3 622	1	1	1	1	= 4	250-350	FPO	4P
St Louis City	D Johnson	480	341 515	5 415	4 000	4	4	4	2	= 14	234 520	PM	4P
St Luke s	R W Ogilvie	214	150 855#	5 447	4 821	1	0	0	0	= 1	250-250	FM	2A
St Mary s Group of Hospitals of St Louis University	H Pinkerton	490	795 341	8 894	6 727	2	2	2	2	= 8	200-400	O	4P
Veterans Administration	D Ware	249	185 410	3 390	3 390	1	1	1	0	= 3	270-347	O	3A
NEBRASKA													
Lincoln													
Lincoln General	H B Miller	81	102 473	5 215	4 830	1	0	0	0	= 1	350 350	FM	1A
Omaha													
Bishop Clarkson Memorial	M Foster	140	237 269	8 735	6 706	1	0	1	1	= 3	350-450	PM	3P
Creighton Memorial-St Joseph	V M Moragues	195	240 675	7 634	7 634	3	2	2	1	= 8	210 260		3A
Immanuel	H F Giffen	79	79 074	8 300	4 389	1	0	0	0	= 1	350 350	PM	1A
Nebraska Methodist	J R Schenken	267	125 000	8 080	6 464	2	1	2	1	= 6	325-400	PM	4P
University of Nebraska	J R Schenken	119	161,333	2 217	2 192	1	0	1	1	= 3	225 300	PM	4P
Veterans Administration [240]	G J Haslam	165	165 523	2 025	1 839	1	1	1	0	= 3	270-347	O	3A
NEW HAMPSHIRE													
Hanover													
Mary Hitchcock Memorial	R K House	226	192 943	4 071	3 712	2	2	1	1	= 6	218 395		4P
NEW JERSEY													
Atlantic City													
Atlantic City	M Ackerman	298	355 056	3 460	2 768	1	1	0	0	= 2	200 200	FM	2A
Camden													
Cooper	W T Read Jr	629	232 357	8 981	8 915	2	0	0	0	= 2	200-250	FM	2P
Our Lady of Lourdes	R L Breckenridge	142	182 977	3 911	2 801	1	1	0	0	= 2	250-400	PM	4P
West Jersey	E F Ziegler	149	151 243	4 490	3 804	1	1	1	0	= 3	250-300	FM	3A
East Orange													
East Orange General	H L Goodman	107	70 403	2 496	2 013	1	0	0	0	= 1	250-250	FM	1P
Veterans Administration	O Auerbach	343	273 336	2 189	2 189	3	0	0	1	= 4	270 462		3A
Englewood													
Englewood	I Gaspar	123	198 123	8 666	7 104	1	0	0	0	= 1	200-250	FP	1A
Flemington													
Hunterdon Medical Center	E V Olmstead	108	77 948	1 780	1 505	1*	0	0	0	= 1	200 200		1A
Hackensack													
Hackensack	D E Brown	171	174 011	4 747	4 147	1	1	1	1	= 4	150 200	FM	4P
Hoboken													
St Mary s	A Ehrlich	135	68 535	3 134	2 488	1	1	0	0	= 2	150 200	FM	2A
Jersey City													
Christ	A Gilbitz	134	133 692	9 042	7 714	1	1	0	0	= 2	200-250	FM	2P
Jersey City Medical Center	A N Gnassi	425	3 1 953	11 162	11 162	2	1	0	0	= 3	146 200	FM	2A
Long Branch													
Monmouth Medical Center	M Rush	416	150 465	6 433	6 433	1	1	0	0	= 2	200 200	FM	2A
Montclair													
Mountainside	J L Work	190	193,360	9 939	5 760	1	1	1	0	= 3	250 300	FP	3P
Morristown													
Morristown Memorial	H F Luddecke	214	227 398	5 706	5 706	1	1	2	0	= 4	225 275	PM	4P
Mount Holly													
Burlington County	J T Bauer	176	94 866	3 489	3 489	2	0	0	0	= 2	100 300	FM	2A
Neptune													
Fitkin Memorial	R E Conover	208	167 371	2 596	2,596	2	0	0	0	= 2	250 250	FM	2A
Newark													
Harrison S Martland Medical Center	E Albano	391	350,346	2 686	2 686	1	2	2	0	= 5	160-212	FM	3A
Newark Beth Israel	L Goldman	253	118 912	6 577	6,577	1	1	1	1	= 4	125 175		4P
United Hospitals of Newark Presbyterian	S A Goldberg	152	182 211	6 977	5 507	1	1	1	0	= 3	275-325	O	3A
St Barnabas Medical Center	W G Bernhard	61	86 189	3 483	3 258	1	1	1	0	= 3	150-225	FM	3P
St Michael s	S J Roe	187	198 799	3 047	3 047	2	1	0	0	= 3	150-215	FM	4P
New Brunswick													
Middlesex General	S E Moolten	121	80 499	2 761	2 735	1	1	0	0	= 2	225 275	FM	2P
St Peter s General	W Jarrett	116	69 814	4 805	3 610	1	1	0	0	= 2	200-225	FM	2A
Orange													
Orange Memorial	A R Abel	197	116 582	3 991	3 980	1*	1	1	1	= 4	225-300	FM	4P
Paramus													
Bergen Pines County	D Roth	343	133 890	796	796	1	1	0	0	= 2	200-200	FM	2A
Passaic													
Passaic General	J R Gannon	157	96 586	3 062	3 029	0	0	2	0	= 2	250-350	FM	3P
St Mary s	R Brill	111	72 794	2 876	2 772	1	1	0	0	= 2	200-225	FM	2P
Paterson													
Barnert Memorial	O U Churg	120	111 656	12,386	7 900	1	0	0	0	= 1	250-250	PM	1A
Paterson General													2A
St Joseph s		310	235 831	6 295	6 295	2	1	1	0	= 4	200 250	FP	4P
Perth Amboy													
Perth Amboy General	H X Tyler	138	165 237	3 759	3 759	1	0	0	0	= 1	200-250	FM	1A
Summit													
Overlook	G L Erdman	161	134 745	4 371	3 708	1	1	0	0	= 2	200-250	FM	2P

Numerical and other references are listed on pages 811 through 814

17 PATHOLOGY—Continued

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OHIO—Continued													
Cincinnati													
Bethesda	J Hamblet	123	62,636	3,972	3,251	1	1	1	0	= 3	260 310	PM	3P
University of Cincinnati Hospital Group													
Cincinnati General	F A Gall	779	210 661	3 548	3 548	4	2	1	1	= 8	100 300	FM	4P
Good Samaritan	L Z Gordon	265	251 100	14,500	5,400	1	1	1	0	= 3	250 300	FM	3A
Jewish	P Wasserman	250	295 605	7,857	7,270	1	1	1	0	= 3	195 235	FP	3P
Cleveland													
Cleveland Clinic	J B Hazard	344	703,145	9 184	9,184	2	2	2	2	= 8	275 350		4P
Cleveland Metropolitan General	T D Kinney	348	635 480	5,590	5 590	4	2	2	2	= 10	150 300	FM	4P
Evangelical Deaconess	F M Bayless	166	109 797#	3 096	3,096	1	1	0	0	= 2	175-200	FM	2A
Huron Road	F Goodsitt	252	349 808	14,098	14,098	1	1	1	0	= 3	210 230	FP	4P
Lutheran	W Sinclair	138	101 051	5,476	5 357	2	1	0	0	= 3	250 262	PM	3P
Mount Sinai	H Goldblatt	248	416 662	8 037	8,037	1	1	1	1	= 4	215-250	FM	4P
St Alexis	P D DeWitt	173	150 088	3,945	3,945	2	0	0	0	= 2	225 275	FMO	1A
St Luke's	A J Segal	318	345,720	6,141	5,770	1	1	1	1	= 4	200 305	FM	4P
St Vincent Charity	J S Mackrell	193	252 940	5 024	4 282	1	1	1	1	= 4	210 250	FP	4P
University Hospitals of Cleveland	A R Moritz	514	562,161	12 977	12,977	3	3	3	1	= 10	150 250	PM	4P
Veterans Administration [307]	J R Kahn	302	421,148	4,467	4,025	1	1	1	1	= 4	271-462	PM	4P
Columbus													
Children's	W A Newton, Jr	352	150,373	3,136		3	0	0	0	= 3	175 300	PM	1P
Grant	B H Hurd	148	137 198	5 156	5 123	1	1	1	0	= 3	325 375	FP	3P
Ohio State University Hospitals													
University	J Von Haam	574	1 044,444	41 167	32,872	4	4	4	4	= 16	177 277	PM	4P
White Cross	K J Johnasmann	225	260 904#	12,506	11,719	1	1	1	0	= 3	290-340	PM	3A
Dayton													
Miami Valley	M Oosting	775	523 938#	11 006	11,006	2	2	2	2	= 8	225 250	FP	4P
Veterans Administration	K C Metzger	319	189 354	1 662	1 662	1	1	0	0	= 2	271 293	O	2A
Elyria													
Elyria Memorial	R G Thomas	92	162,774	5 089	4,829	1	0	1	0	= 2		FM	4P
Garfield Heights													
Marymount	F F Siegler	108	150,279	2,499	2,248	1	0	0	0	= 1	250 250	FM	2A
Hamilton													
Mercy	K Lande	123	136,068	2 344	2,344	1	1	1	0	= 3†	200 300		3A
Lima													
St Rita's	C L Blumstein	168	147,268	4 637	3 612	1	1	1	1	= 4	400-450	PM	4P
Lorain													
St Joseph	C Chesner	104	140 195	3 766		1	0	1	0	= 2	300 300	FM	4P
Springfield													
Springfield City	R E Wybel	171	143,264	7 372	6 452	1	0	0	0	= 1	375	FM	2A
Toledo													
Maumee Valley	J G Snavely	172	148,204	1 949	1 938	1	1	1	1	= 4	285 300	FP	4P
Mercy	F L Burns	241	184,331	6 142	4 778	1	1	1	1	= 4	275-350	FM	4P
St Vincent's	M F Vidoli	271	213 616#	6 355	4 204	1	1	1	0	= 3	275 325	FP	4P
Toledo	B Steinberg	363	176 568	6 307	5 380	1	1	1	1	= 4	275 350	FM	4P
Warren													
Trumbull Memorial	R J Williams	183	186 710	3 882	3 688	1	1	0	0	= 2	300-400	FP	2A
Youngstown													
St Elizabeth	B Taylor	264	277 939	7 818	5 737	1	1	1	1	= 4	300 375	FM	4P
Youngstown	A E Rappoport	467	403 016	8,201	8 201	2	2	2	2	= 8	275-400	FM	4P
OKLAHOMA													
Oklahoma City													
St Anthony's	W T Snoddy	178	270 499	7,651	5 104	0	1	0	0	= 1	300 350	FM	4P
University of Oklahoma Medical Center													4P
University Hospitals	W E Jaques	208	422 600	5 879	5,127	1	1	1	1	= 4	200 275	PM	
Veterans Administration		266	192,853	2,209	1 629								
Tulsa													
Hillcrest Medical Center	L Lowbeer	193	207 661	8 736	6 340	3	1	1	1	= 6	200 200	FM	4P
St John's	E E Palik	218	305 755	9 815	7,297	1	1	1	1	= 4	175-275	FP	4P
OREGON													
Portland													
Emanuel	V D Sneeden	315	213,832#	9 002	7,012	1	1	0	0	= 2	275 285	PM	3A
Good Samaritan	M W Heinmann	224	353 196#	8 629	6 782	1	1	1	1	= 4	275 305	PM	4P
Providence	T Cochran J S Arnold	211	293 296	8 156	7 243								4P
St Vincent's	J E Nohlgren	301	244,327	11,689	10,389	1	1	1	1	= 4	275 305	PM	4P
University of Oregon Medical School													
Hospitals and Clinics [323]	W C Hunter R Grondahl	532	363,024	5 931	5 931	4	4	0	0	= 8	165 215	FM	4P
Veterans Administration	E J Losli	327	213,080	3,199	3 000	1	1	0	0	= 2	271-412	PM	2A
PENNSYLVANIA													
Abington													
Abington Memorial	J W Elman	236	252 910	18,973	18 973	1	1	1	1	= 4	350 450	FM	4P
Allentown													
Allentown	G Sehn	283	271,522	5 784	5 192	1	1	1	1	= 4	225-416	FM	3A
Sacred Heart	D E Stader	176	195 291	8 859	8 365	1	1	0	1	= 2	225 275	FP	2A
Altoona													
Altoona	G J Held Jr	179	146,227	4 767	4 600	1	1	0	0	= 2	325-350	FM	2A
Bethlehem													
St Luke's	E J Benz	247	216 374	5 450	5,450	0	1	0	1	= 2	225 300	FP	4P
Bryn Mawr													
Bryn Mawr	M M Strumia	288	296,786	5,770	5 257	1	1	1	1	= 4	200 275	FP	4P
Chester													
Chester	W N Campbell	180	165 000	3,250	3 250	1	0	0	0	= 1	350 350	FM	2A
Danville													
George F Geisinger Memorial	T K Hepler	182	310 942	4,358	3 725	1	1	0	1	= 3	175 250	FM	4P
Darby													
Thomas M Fitzgerald-Mercy	W H Miller	185	132 874	3,223	3,223	1	1	1	1	= 4	250 400	PM	4P
Erie													
Hamot	E L Armstrong	220	329,820	8 673	7 580	1	1	1	1	= 4	250 300	FM	4P
St Vincent	R B Eisenberg	199	202 053	6,406	6 406	1	1	1	1	= 4		FM	4P
Harrisburg													
Harrisburg	F W Brason	472	479,306	12 894	12 894	1	1	1	1	= 4	250-	FP	4P
Harrisburg Polyclinic	J S Forrester	252	290,348	7,191	6,991	1	1	0	0	= 2	250 375	FM	2A

Numerical and other references are listed on pages 811 through 814

17 PATHOLOGY—Continued

	Chief of Service or Program Director	Number of Autopsies	Total Number of Laboratory Examinations	Number of Surgical Specimens	Number Examined Microscopically	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	FM Main Affiliate FM PM O	Length of Approved Program (Years)
PENNSYLVANIA—Continued													
Johnstown													
Conemaugh Valley Memorial	W W Ayres	159	210 918	5 733	4 608	1	1	1	1	= 4	300-350	FM	4P
Lancaster													
Lancaster General	W M O Donnell	262	184 191	4 963	4 963	2		0	0	= 4	200-200	FM	2A
St Joseph's	H C Shaub	141	174 155	5 614	5 457	1	1	0	0	= 2	300-300	FP	2A
Norristown													
Montgomery	H I Tamaki	100	93 011	2 303	2 233	2	0	0	0	= 2	250	FM	2P
Philadelphia													
Albert Einstein Medical Center													
Northern Division	H Brody	331	282,890	5,810	810	2	2	2	2	= 8	125-200	FM	4P
Southern Division	D Moranza	160	210 378	7 797	7 797	1	1	1	1	= 4	125-200	FM	4P
Chestnut Hill	S B Rose	93	81 024	2 257	2 067	1	1	0	0	= 2	350-350	FM	4P
Children's	I J Wolman	158	271 011	1 474	1 474	1	0	0	0	= 1	100	FM	1A
Episcopal	A D Wallis	175	188 651	2 820	2 820	1	0	0	0	= 1	150-150	FM	4P
Frankford	I Rauer	122	150 079	3 731	3 731	1	1	0	0	= 2	275	FP	3P
Germantown Dispensary and Hospital	F Fite	190	140 811	4 193	4 193	1	1	1	1	= 4	175-200	FM	4P
Graduate Hospital of the University of Pennsylvania	A Valdes Dapena	164	201 239	4 610	4 610	1	1	1	0	= 3	166 250	FM	3A
Hahnemann Medical College and Hospital	J F Imbriglia	299	339 891	6 824	6 824	2	2	2	2	= 8	75-75	FM	4P
Hospital of the University of Pennsylvania	H I Enterline R Norris	459	1 000	9 000	9 000	3	3	3	3	= 12	150-150	PM	4P
Hospital of the Woman's Medical College of Pennsylvania	M M Porter I N Dubin	132	100,275	2 203	2 203	1	1	1	1	= 4	125-175	FM	4P
Jefferson Medical College	P A Herbut	332	481 745	11 405	11 405	1	2	3	2	= 8	150 300	PM	4P
Lankenau	C F Brown	234	182 407	4 140	4 140	1	1	1	1	= 4	200 250	FM	4P
Mercy Douglass	W P Belk	52	80 663	1 666	1 609	1	0	0	0	= 1	200 200	FM	1C
Misericordia	H F Marx	156	158 004	3 378	2 040	1	1	0	0	= 2	250 300	FM	2P
Pennsylvania	A R Crane	303	351 307	4 106							100		4P
Philadelphia General	W F Ehrich	1 130	729 189	6 841	6 841	3	2	2	0	= 7	125 250	FM	4P
Presbyterian	J Butcher	278	175 240	5 088	4 683	2	1	1	1	= 5	235-299	FM	4P
Temple University	J F Ackerman	650	717 118	9 746	9 746	2	2	2	3	= 9	175-250	PM	4P
Veterans Administration	S Bornstein	357	222 065	2 428	2 399	1	1	1	0	= 3	270-462	O	4P
Pittsburgh													
Allegheny General	R C Cramer	284	228 447	5 021	5 021	1	1	1	1	= 4	400-475	FM	4P
Health Center Hospitals of the University of Pittsburgh School of Medicine													
Children's	C H Fetterman	187	122 889	1 650	1 650	2	1	0	0	= 3	200 250	PM	1P
Presbyterian Woman's	I J Moran	243	19 681	5 057	5,052	3	3	2	2	= 10	125-175	FM	4P
Mercy	M M Bracken	317	404 361	9 206	7 764	1	2	1	0	= 4	235-310	FM	4P
Montefiore	H Mandelow	191	180 747	5 866	4 632	1	1	1	1	= 4	225-300	FM	4P
St Francis General Hospital and Rehabilitation Institute	R D Hamilton	197	251 490	5 710	3 091	1	1	1	1	= 4	240-305	FP	4P
St Margaret Memorial	F F Kurtz	72	114 848	1 928	1 928	1	0	0	0	= 1	300-300	FM	1P
Shadyside	F I Heller	211	171 030	4 272	2 765	1	1	1	1	= 4	350 550	O	4P
South Side	J Goodman	198	168 710	3 992	3 892	1	1	0	0	= 2	350-350	FM	2A
Veterans Administration	F R Fisher	410	705 401	3 464	3 464	2	1	1	1	=	270-827	O	4P
Western Pennsylvania	R G McManus	339	308 859	8 337	5 319	2	2	1	1	= 6	250 300	FP	3A
Reading													
St Joseph's	C Desjardin F Chen See	160	104 207	5 351	4 759	1	1	0	0	= 2	250 250	FM	4P
Sayre													
Robert Packer	R S McCants	177	272 472	3 609	3 559	1	1	1	1	= 4	235-375	PM	4P
West Reading													
Reading	W P Jennings	378	193 736	4 541	4,523	2	2	2	2	= 8	225-300	FM	4P
Scranton													
Scranton State	J J O Connor Jr	121	93 661	1,522	1 332	1	0	0	0	= 1	500-500	PM	1A
Wilkes-Barre													
Wilkes Barre General	C F Rodriguez	153	140 037	11 357	8 709	1	0	0	0	= 1	225		2A
Williamsport													
Williamsport	M G Colvin	278	153 250	6 474	5 738	1	1	1	1	= 4	250-350	FP	4P
York													
York	I F Burkart	277	393 698	8 678	8 678	1	1	1	1	= 4	225-300	PM	3A
PUERTO RICO													
Aguadilla													
Aguadilla District	D Lutz	245	87 470	1 490	1 450	1	0	0	0	= 1	300-350	FM	1A
Arecibo													
Arecibo District	I A Carro	238	117 832	2 568	2 568	1	0	0	0	= 1	250-350	FM	1A
Caparra Heights													
University	F Koppisch	229	127 996	5 981	5 981	1	2	1	0	= 4	250 350	FM	4P
Ponce													
Ponce District General	F Rivera	356	181 704	2 783	2 783	2	2	0	0	= 4	250-350	FM	3A
San Juan													
Dr I Gonzalez Martinez Oncologic	R M Rojas	33	23 999	4 551	4 395	0	0	1	0	= 1	300-300	PM	1A
San Juan City	F Koppisch	289	316 947			2	1	1	0	= 4	175-325	FM	3A
Veterans Administration (San Patricio) [313]	I M Reyes	66	100 276	1 [illegible]	1 265	1	0	0	0	= 1	318-408		1A
RHODE ISLAND													
Newport													
Newport	I R Cox	72	138 935	3 471	2 480	1	0	0	0	= 1	150-200	FM	1A
Pawtucket													
Memorial	C I Paparo	136	197 007	13 553	3 514	1	0	0	0	= 1	250-250		4P
Providence													
Rhode Island	H Fanizer	495	466 223	10,536	10 422	2	2	2	2	= 8	125-200	FM	4P
SOUTH CAROLINA													
Charleston													
Teaching Hospital of the Medical College of South Carolina	H R Pratt Thomas	465	399 827	24,347	21 913	2	2	2	0	= 6	200-200	O	4P
Medical College													
Roper													
Greenville													
Greenville General	F A Drukin	229	235 214	15 930	7 909	1	1	1	1	= 4	275-350	O	4P
Spartanburg													
Spartanburg General	J R Cain	194	214,534	7 292	552	1	1	1	1	= 4	375-525	PM	4P

Numerical and other references are listed on pages 811 through 814

17 PATHOLOGY—Continued

	Chief of Service or Program Director	Number of Autopsies	Total Number of Laboratory Examinations	Number of Surgical Specimens	Number Examined Microscopically	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month Min Max	Main Affiliation FM PM O	Location of Main Affiliation (See Key)
SOUTH DAKOTA													
Sioux Falls													
Sioux Valley	C Mitchell	108	93 968			0	2	0	0 =	2	150 150	FM	3P
TENNESSEE													
Chattanooga													
Baroness Lilander	J W Adams	317	397,991	18 463	18 463	1	1	1	1 =	4	325 400		4P
Knoxville													
East Tennessee Baptist	R J Leffler	82	120 088	5,620	4 496	2	1	0	0 =	3	300 350	PM	3P
St Mary's Memorial	G S Mahon	136	119 420	5,901	3 949	2	1	1	1 =	5	250 325	FP	4P
University of Tennessee Memorial Research Center and Hospital	F Jones	160	249,261	2 689	2,361	1	1	1	0 =	3	320 340	FM	4P
Memphis													
Baptist Memorial	M Trumbull	381	3 5 492	1 5 093	13 067	3	2	2	2 =	9	325 400	PM	4P
City of Memphis Hospitals	D H Sprunt	747	59 463	5 346	5 346	5	4	3	0 =	12	150 200	FP	4P
Methodist	W W Tubby	139	187,535	9 605	8 670	1	1	1	0 =	3	325 375	FM	3P
St Joseph	I Prieto, Jr	109	148 238	4 766	4 932	1	1	0	0 =	2	325 375	FM	2A
Veterans Administration [1]	J M Young	443	417,717	6 142	5 756	2	2	1	0 =	5	271 347	PM	3P
Nashville													
Baptist	J G Womack	148	203 071	12 880	5 207	1	1	0	0 =	2	300 300	FM	4P
George W Hubbard	H M Frazier	191	231,774	2,191	2 100	1	1	0	0 =	2	175 250	FM	2A
St Thomas	D K Gotwald	119	209 487	5 050	3,761	2	0	0	0 =	2	300 300	FP	4P
Vanderbilt University Affiliated Hospitals													
Nashville General	W A De Monbreum	117	171 779	2,522	2 560	2	0	0	0 =	2	325 350	FP	2A
Vanderbilt University	J I Shapiro	288	31,826	3 136	3 368	3	3	2	0 =	8	100 125	FM	4P
Veterans Administration	N Lude												4P
Oak Ridge													
Oak Ridge Institute of Nuclear Studies—Medical Division [2]	B M Nelson	32	1,006	80	80	0	0	0	1 =	1	400 400	O	1A
TEXAS													
Austin													
Brackenridge	D M Quinn	151	84 953	3,481	3,221	1	1	1	1 =	4	250 250	FM	4P
Dallas													
Baylor University Medical Center	C J Race	350	430,902	14 222	12 664	3	2	2	2 =	9	210 250	PM	4P
Methodist	A B Cairns	92	77 183	7 201	5 039	1	1	0	0 =	2	275 325	FP	3P
Parkland Memorial	C Ashworth	370	1 161 771	11 550	11 550	3	3	3	2 =	11	225 275	PM	4P
St Paul	J H Childers	214	462,346	9 163	8 781	2	2	2	2 =	8	225 300	FP	4P
Veterans Administration	H J Reinhart	306	304 125	2 185	2 185	1	1	1	1 =	4	271 412		4P
Fort Worth													
Harris	C D Fitzwilliam	150	220 405	7 096	6 121	1	1	0	0 =	2	300 375	FP	2A
St Joseph's	O J Wollenman Jr	153	197 585	4 625	3 665	1	1	1	1 =	4	300 400	FP	4P
Galveston													
University of Texas Medical Branch Hospitals	H Hopps	337	774 510	9 303	9 253	3	3	3	0 =	9	160 160	FP	4P
Houston													
Baylor University College of Medicine Affiliated Hospitals													
Jefferson Davis	S A Wallace	451	6 210	120	6 090	2*	1	1	1 =	5	125 165	FM	4P
Methodist	J P Abbott	246	516 779	19 830	17 916	1	1	1	1 =	4	100 175	FM	4P
Texas Children's	H S Rosenberg	131	213 913	1 870	1,496	1	0	0	1 =	2	100 175	FM	1A
Veterans Administration	B Halpert	443	173 217	3 568		1	1	1	1 =	4	270 412	PM	4P
Hermann	W C Brown	359	597 190	15 063	13 223	1	1	1	1 =	4	300 436	PM	4P
Memorial	J Leedet	149	253 751	7 291	7 291	1	1	1	0 =	3	220 270	PM	3P
St Joseph's	P M Marcuse	195	300 861	6 544	5 894	2	1	0	0 =	3	220 350	PM	4P
St Luke's Episcopal	C J Lind	107	350 792	5 628	5 396	1	1	1	1 =	4†	100 225	FM	4P
University of Texas M D Anderson Hospital and Tumor Institute	W O Russell	322	317 515	8 750	8 750	0	2	2	1 =	5	300 416	O	4P
Lubbock													
Methodist	K A Keffler	176	174 217	8 986	8 481	1	1	1	1 =	4	300 400	FP	4P
McKinney													
Veterans Administration		58	81 732	795	795								4P
San Antonio													
Baptist Memorial	A O Severance	251	230 055	6 266	5 505	1	1	1	1 =	4	150 350	FP	4P
Robert B Green Memorial	D I Galindo	262	256,074	3 101	3 094	1	1	1	0 =	3	150 300	FM	3A
Santa Rosa	A H Jacob	294	267 254	5 996	5 601	1	1	1	1 =	4	275 300	FP	4P
Temple													
Scott and White Memorial	J C Stinson W A Powell	124	310 739	7 531	9 854	1	0	0	0 =	1	300 300	O	4P
UTAH													
Ogden													
St Benedict's	F L Paulker	89	132 002	1 697	2 585	1	0	0	0 =	1	275 275	PM	1A
Thomas D Dee Memorial	W A Bennett	130	132 921	6 367	6 023	0	2	0	0 =	2	325 350	PM	3P
Salt Lake City													
Dr W H Groves Latter Day Saints	J H Carlquist	283	378 034	9 519	7 229	1	1	1	1 =	4	250 350	FP	4P
Holy Cross	C McNeil	102	153 855	5 879	4 050	0	1	0	1 =	2		FP	4P
University of Utah Affiliated Hospitals													
Salt Lake County General	W Carnes	261	130 158	1 621	1 587	2	2	1	1 =	6	225 350	O	3A
Veterans Administration	J Cochran	214	189 885	1 074	1 042	3	0	0	0 =	3	271 462	O	1A
VERMONT													
Burlington													4P
University of Vermont Affiliated Hospitals													
De Goesbriand Memorial	R Coon	112	70 481	2 456	2 156								
Mary Fletcher	R W Coon	261	109 357	4 425	3 740	2	2	2	2 =	8	200	O	
VIRGINIA													
Charlottesville													4P
University of Virginia	D L Smith	417	322 055	11 095	11 095	1	2	0	0 =	3	200 300		
Danville													4P
Memorial	L W Powell Jr	154	127 154	4,816	4,816	1	1	1	1 =	4			
Lynchburg													
Lynchburg General	S M Bouton	83	78,262#	4,363	4,188	0	0	1	1 =	2	200 300	PM	2P
Newport News													
Riverside	M F Sherrill	89	207,763#	8 895	8 895	1	0	0	0 =	1	250 250	FM	1A
Norfolk													
De Paul	A F Strauss	240	225 622	8 319	7 921	1	1	1	1 =	4	225 300	FM	4P
Norfolk General	F D Levy, R Shuman	205	194,426	23 380	17,076	1	1	1	1 =	4	290 465	FM	4P

Numerical and other references are listed on pages 811 through 814

17 PATHOLOGY—Continued

	Chief of Service or Program Director	Number of Autopsies	Total Number of Laboratory Examinations	Number of Surgical Specimens	Number Examined Microscopically	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O	Length of Approved Program (Years)
VIRGINIA—Continued													
Portsmouth													
Maryview													2A
Richmond													
John ton Willis	J I Thornton	97	80 132#	2 579	2 087	1	0	0	0	= 1	250 250	FM	1A
Medical College of Virginia—Hospital Division	C Margolis S Kay H Kupfer	264	618 264	9 774	8 928	8	2	[illegible]	0	= 13	200 300	FM	4P
Richmond Memorial	W Monroe	153	240 000	6 900	[illegible]	2	0	0	0	= 2	350 350	FM	1P
Veterans Admin	J R Kriz	266	258 996	2 917	2 803	1	1	1	1	= 4	271 412	PM	4P
Roanoke													
Roanoke Memorial	J C Gale	134	145 614	7 657	3 142	1	1	1	1	= 4	350 350	FP	4P
WASHINGTON													
Seattle													
Children's Orthopedic	S V Creighton	172	151 677#	1 805	722	0	1	1	1	= 3	230 330	PM	1A
Doctors	R C Lill	146	128 099	4 924	4 350	1	1	0	0	= 2	250 300	FM	2A
Providence	D C Mason	260	125 412#	5 900	3 444	1	1	0	0	= 2	250 350	FP	2A
Swedish	J K Lund	280	209 046	10 453	5 822	1	1	1	1	= 4	225 388	FP	4P
University of Washington Affiliated Hospital													
King County—Unit No 1 (Harborview)	J J Schuldberg	693	275 226#	4 500	4 172	2	1	1	1	= [illegible]	150 375	FM	4P
Veterans Admin	J P Benditt	278	139 593	2 028	1 956	2	0	1	0	= 3	241 347		5P
Virginia Mason	H W Jones	186	232 483	6 378	5 752	1	1	1	1	= 4	175 375	FP	4P
Spokane													
Deaconess	J J Judden	250	150 589	5 381	5 996	1	0	0	0	= 1	300 300	FP	3A
Sacred Heart	J J Hill	260	198 815	10 191	8 741	2	1	0	0	= 3	250 275	FP	3A
Tacoma													
St Joseph	C R McNoll R Vimont	83	55 763	4 684	4 363	2	2	0	0	= 4	250 300	FM	2A
Tacoma General	C J Fairson M J Wick		171 939	14 100	11 578	1	1	1	1	= 4	300-450	FM	4P
WEST VIRGINIA													
Beckley													
Beckley Memorial	W V Jaqueur	123	148 329	3 151	3 000	1	0	0	0	= 1	400 400	FP	1A
Charleston													
Charleston General	P Endewick W Garland	110	121 689	3 043	3 005	1	1	1	0	= 3	225 275	FP	4P
Memorial	G B Sawyer	167	115 595	6 313	6 343	1	1	0	0	= 2	250 275	FP	2A
Clarksburg													
St Mary's	H Fischer	150	155 000	4 719	3 500	1	1	0	0	= 2	300-	FP	2P
Huntington													
Cabell Huntington	S Werthammer	136	168 865	5 268	5 012	1	0	0	0	= 1	375-425	FM	3A
St Mary's	S Werthammer	136	247 782	4 696	3 857	0	0	1	0	= 1	275 325	FP	3A
Martinsburg													
Veterans Admin	R C Gottschalk	146	186 065	1 396	1 279	2	0	0	0	= 2	271 462	O	2P
Wheeling													
Ohio Valley General	H G Little	179	147 347	5 995	5 046	1	1	1	1	= 4	375 375		4P
WISCONSIN													
Beloit													
Beloit		83	59 868	2 501	1 710								2A
Fond Du Lac													
St Agnes	R W Steube	135	154 610	6 132	3 011	2	2	0	0	= 4	250-300	FM	2A
Madison													
Madison General	P G Piper	162	142 119	6 198	5 247	1	1	1	1	= 4	200 275	FP	4P
University Hospitals	F Larson D Angevine	327	306 397	4 391	4 351	2	1	0	0	= 3	100 250	FM	4P
Marshfield													
St Joseph's	J J Glassy	165	100 147	3 331	3 085	1	1	1	0	= 3	350 350	FM	3P
Milwaukee													
Columbia [as]	K Ritchie	187	118 125#	4 194	2 904	1	1	1	1	= 4	270 345	PM	4P
Evangelical Deaconess	R S Haukohl	139	159 611	4 757	944	1	1	1	1	= 4	300 375	FP	4P
Milwaukee County	P Kammelstiel	723	418 853	4 183	4 183	2	3	2	1	= 8	229-434		4P
Milwaukee	J A Birge	163	182 268	7 246	6 317	1	0	0	0	= 1	281 357	PM	4P
Mount Sinai	N Fazer	143	179 083	4 619	4 619	1	1	1	1	= 4	300 350	FM	4P
St Francis	J M Lubitz	114	110 990	3 658							275		4P
St Joseph's	C H Altshuler	196	224 082	10 050	8 734	1	1	1	1	= 4	300 350		4P
St Luke's	J L Clarke	279	151 716	3 306	3 318	1	1	1	1	= 4	275 425	FM	4P
St Mary's [as]	S B Pessin R K Voet	153	115 169	5 115	3 657	1	1	1	1	= 4	300 395	O	4P
Veterans Admin (Wood)	R M Maynard	457	353 656	3 217	3 014	3	2	1	0	= 6	271 412	PM	4P

18 PEDIATRIC ALLERGY

The programs in Pediatric Allergy which have been approved by the Council and the American Board of Pediatrics through the Residency Review Committee for Pediatrics are listed following the programs in Pediatrics and begin on page 756

19 PEDIATRICS

Residency programs in the following hospitals have been approved by the Council the American Academy of Pediatrics and the American Board of Pediatrics through the Residency Review Committee for Pediatrics as offering full training in the specialty (i e TWO or more years)

Hospitals 248 Residencies 1884

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O
UNITED STATES AIR FORCE													
TEXAS													
U S Air Force San Antonio	T M Holcomb	46	1 470#	42	86	18 626	3	3	0	0	= 6		
UNITED STATES ARMY													
CALIFORNIA													
Letterman General San Francisco	F C Biehusen	25	1 300	22	89	15 100	3	3	0	0	= 6		FM

Numerical and other references are listed on pages 811 through 814

19 PEDIATRICS—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961-1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Male Attendance
UNITED STATES ARMY—Continued													
COLORADO													
Fitzsimons General, Denver	H. J. Umlauf, Jr.	19	821	32	100	26,488	3	3	0	0	= 6		
DISTRICT OF COLUMBIA													
Walter Reed General, Washington	O. C. Bruton	58	1,578	44	86	29,110	3	3	0	0	= 6		
HAWAII													
Tripler Army, Honolulu	F. P. Fairchild	21	1,345	8	75	39,326	2	2	0	0	= 4		
TEXAS													
William Beaumont General, El Paso	D. C. Plunket	18	1,331	22	77	53,437	2	2	0	0	= 4	391-565	PM
Brooke General, San Antonio	F. F. Geppert	25	849	28	96	38,798	3	3	0	0	= 6		
WASHINGTON													
Madigan General, Tacoma	R. B. Griffin	29	1,783	10	90	35,074	2	2	0	0	= 4		
UNITED STATES NAVY													
CALIFORNIA													
U. S. Naval, Oakland	M. Kurzrok	11	779	8	87	41,640	2	1	0	0	= 3		
U. S. Naval, San Diego	L. R. Moeller	36	1,996	23	96	42,339	2	2	0	0	= 4		
MARYLAND													
U. S. Naval, Bethesda	T. L. Cone	30	2,688	73	85	11,400	2	2	0	0	= 4		
MASSACHUSETTS													
U. S. Naval, Chelsea	A. Margileth	19	1,015	41	87	15,173	2	3	0	0	= 5		
PENNSYLVANIA													
U. S. Naval, Philadelphia	W. F. Neikirk	18	988	14	86	22,799	2	2	0	0	= 4		
VIRGINIA													
U. S. Naval, Portsmouth	F. B. Becker	41	2,129	42	83	30,625	2	2	0	0	= 4		
DEPARTMENT OF HEALTH, EDUCATION AND WELFARE													
DISTRICT OF COLUMBIA													
Freedmen's, Washington	K. B. Scott	28	712	22	71	3,573	1	1	2	0	= 4	308-417	PM
OTHER FEDERAL													
CANAL ZONE													
Balboa Heights													
Gorgas	D. Hirschl	35	827	12	100	1,442	1	1	0	0	= 2	408-593	0
NONFEDERAL AND VETERANS ADMINISTRATION													
ALABAMA													
Birmingham													
University of Alabama Medical Center: Children's	H. C. Shirkey	47	3,394	42	45	8,041	6	2	1	0	= 9	250-350	FM
University Hospital and Hillman Clinic	K. Hale	34	1,435	67	54	5,899	6	6	0	0	= 12	148-160	
Fairfield													
Lloyd Noland	G. C. McCullough	31	1,338	9	56	34,510	2	2	0	0	= 4	250-300	FM
Mobile													
Mobile General	F. B. Baumhauer		1,461	58	69	4,811	2	1	0	0	= 3	300-140	PM
ARIZONA													
Phoenix													
Maricopa County General	D. B. Manley	35	975	40	65	6,631	1	1	0	0	= 2	313-397	PM
St. Joseph's	H. Lipow	51	1,285	29	69	2,157	1	1	0	0	= 2	250-375	FM
ARKANSAS													
Little Rock													
University	F. C. Panos	33	919	88	71	8,487	4	4	1	0	= 9	140-175	0
CALIFORNIA													
Bakersfield													
Kern County General	J. Vinkloy	46	1,405	29	79	19,750	2	2	0	0	= 4	350-425	0
Fresno													
General Hospital of Fresno County [78]	M. M. Cohen	43	4,011	49	76	7,140	3	2	0	0	= 51	300-375	PM
Los Angeles													
California Babies and Children's	T. I. Birnberg	18	1,610	11	73	21,474	2	1	0	0	= 3	250-350	FM
Cedars of Lebanon	B. Kagan	17	1,870	29	85	4,296	3	2	0	0	= 51	265-350	FM
Children's	R. Ward	357	9,348	255	83	73,468	15	12	2	0	= 29	150-400	PM
Los Angeles County	K. Ward, R. F. Chinnock	129	5,052	114	80	71,918	8	8	0	0	= 16	278-388	FM
Queen of Angels	D. Chambers	20	1,725	10	75	2,119	2	2	0	0	= 4	275-300	FPO
University of California	J. M. Adams	40	1,774	95	92	10,000	4	2	2	0	= 8	240-476	PM
White Memorial	R. F. Chinnock	15	716	22	90	10,017	2	1	0	0	= 3	215-255	
Oakland													
Children's Hospital of the East Bay	H. Long	93	7,211	104	85		6	6	0	0	= 12	225-350	PM
Highland-Alameda County	M. Schwartz	33	1,314	40	45	6,889	2	1	0	0	= 3	300-375	FM
Kaiser Foundation	A. L. King	15	782	18	85		2	2	0	0	= 4	315-310	FM
Palo Alto													
Stanford Medical Center and Affiliated Hospitals: Palo Alto-Stanford Hospital Center	N. Kretchmer	2	90	11	81	2,176	6	2	2	1	= 11	250-375	0
San Francisco													
Children's	H. E. Thelander	35	1,444	22	82	16,791	2	2	0	0	= 4	250-300	FP
Kaiser Foundation	J. G. Sutlile	11	721	13	85	59,379	2	2	0	0	= 4	315-390	FP
St. Luke's	L. E. Hardgrave	16	555			5,833	1	1	0	0	= 2	325-350	FP
St. Mary's	R. Flood	25	2,077	6	100	3,686	1	1	0	0	= 2	200-250	FP
University of California Hospitals: San Francisco General	L. B. Shaw, M. Grossman	46	1,989	56	91	17,154	2	4	1	0	= 7	249-426	0
		36	1,275	22	77	11,531	3	1	1	0	= 5	220-360	
San Jose													
Santa Clara County	H. Hardenbergh	23	464	19	63	2,611	2	1	0	0	= 3	270-320	PM
Santa Monica													
St. John's	A. B. Polson	18	1,654	8	75		3	0	0	0	= 3	225-250	PM

Numerical and other references are listed on pages 811 through 814

19 PEDIATRICS—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O
CALIFORNIA—Continued													
Stockton													
San Joaquin General	F Rubstaller	23	783	16	75	2 927	1	1	0	0	= 2	275-300	PM
Torrance													
Harbor General	K Zike	28	1 405#	33	79	15 038	3	3	0	0	= 6	273 288	FM
COLORADO													
Denver													
Children's	S E Wheelock	109	5 431	103	86	7 304	6	6	0	0	= 12	200 225	PM
University of Colorado Medical Center													
Colorado General	C H Kempe	25	907	80	84	12 375	2	8	4	0	= 14†	180-205	O
Denver General	C Riley	35	1 918#	23	83	12 180						179 205	
CONNECTICUT													
Hartford													
Hartford	A U Peacock	43	7 290	4	87	1 714	1	1	0	0	= 2	125 207	PM
St Francis	J F Murphy	48	3 019	9	77	11 070	1	2	0	0	= 3	175 200	FP
New Haven													
Yale-New Haven Medical Center													
Grace New Haven Community	N K Ordway	29	1 176	53	87	10 378	6	5	2	0	= 13	50 125	FM
Hospital of St Raphael	F F McMenney	26	2 192	15	40	1 623	3	1	0	0	= 4	300-335	PM
DELAWARE													
Wilmington													
Delaware	R O Y Warren	44	2 405#	59	70	3 172	2	2	0	0	= 4	220 240	FP
DISTRICT OF COLUMBIA													
Washington													
Children's	R H Parrott	84	3 824	99	85	48 177	12	9	2	0	= 23	200 325	PM
District of Columbia General	F Reichelderfer	60	2 072	43	62	38 859	6	5	1	0	= 12	233 283	O
Georgetown University	F G Burke	22	1,556	23	65	3 806	5	3	2	0	= 10	175 270	FM
FLORIDA													
Gainesville													
University of Florida Teaching Hospital and Clinics	R I Smith	18	764	17	82		4	3	3	1	= 11	217 450	
Jacksonville													
Duval Medical Center-St Vincent's													
Duval	J K David Jr	15	668	57	73	8 734	2	2	0	0	= 4	200 225	FM
St Vincent	H A Carithers	37	2 847#	30	47	1 192	2	1	0	0	= 3	325-350	PM
Miami													
Jackson Memorial	R B Lawson	68	1 890	63	65	7 513	6	5	1	0	= 12	200-275	PM
GEORGIA													
Atlanta													
Crawford W Long Memorial	F D Jone	26	1 478	88	54	4 057	5	1	0	0	= 6	285 300	O
Georgia Baptist	J Yampolsky	33	2 208	23	61	388	3	2	0	0	= 5	330-355	PM
Grady Memorial	K W Blumberg	53	1 612	67	63	40 907	4	4	2	0	= 10	100-200	FM
St Joseph Infirmary	C D Fowler	23	1 498	14	93	1 470	1	1	0	0	= 2	270 285	PM
Augusta													
Medical College of Georgia Hospital	V C Vaughan						4	3	1	0	= 8		
Eugene Talmadge Memorial	V Vaughan	22	63	40	73	1 921						250-416	O
University	W A Wilke	63	4 732	91	52	4 723						200 225	
HAWAII													
Honolulu													
Kaiulani Children's	C K Kobayashi	53	4 231	35	83	4 418	3	4	0	0	= 7	200-250	FM
ILLINOIS													
Chicago													
Children's Memorial	J A Bigler		2 732	66	91	65 431	18*	0	0	0	= 18	100 150	FM
Cook County	J Greengard	367	5 575	575	75	22 857	13	13	0	0	= 26	140-140	FM
Loyola University (Stritch School of Medicine) Affiliated Hospitals													
Mercy	J R Christian	30	1 477	30	77	5 763	5	5	1	0	= 11	225-300	FM
Michael Reese	J Metcoff	102	1 977	206	71	13 163	7	7	2	0	= 16	125 175	FP
Mount Sinai	J Hork	33	2 491	65	86	4 104	1	1	1	0	= 3	225-275	PM
Presbyterian-St Luke's	W R Dammers	43	2 507	71	91	6 650	3	2	0	0	= 5	125-150	FM
Provident	C I Runner	18	7 292	13	100	1,502	1	1	0	0	= 2	200-200	FM
University of Chicago Clinics	F H Wright	41	1 430	95	86	17 026	7	6	1	0	= 14	250 305	O
University of Illinois Research and Educational Hospitals	H N Sanford	0	1 4[illegible]	60	93	10 966	3	4	0	0	= 7	160-185	PM
Evanston													
St Francis	J B Murphy	45	2 935	12	75	1 112	1	1	0	0	= 2	260-270	FM
Evergreen Park													
Little Company of Mary	A W Fleming	[illegible]	4 290	31	50	778	4	4	0	0	= 8	225 275	FM
INDIANA													
Indianapolis													
Indiana University Medical Center													
Indiana University Medical Center Hospitals	J I Meiks	153	6,218	202	68	6 629	4	4	0	0	= 8	225-250	PM
Marion County General	H Call	90	805	16	75	14 245	1	1	0	0	= 2	265 295	PM
Methodist	D I Rogers	46	2 189	53	68	2 299	1	1	0	0	= 2	200-320	PM
St Vincent's	H Stadler	59	2 958	15	80	1 658	1	1	0	0	= 2	275-425	PM
IOWA													
Des Moines													
Iowa Methodist	I F Hill	67	4 635	69	74	13 643	4	4	0	0	= 8	200 250	FM
Iowa City													
State University of Iowa Hospitals	W W McCrory	52	2 19	77	79	11 925	5	4	1	0	= 10	200-255	FM
KANSAS													
Kansas City													
University of Kansas Medical Center	H C Miller	35	1 407	67	87	20 025	8	8	0	0	= 16	125-150	PM

Numerical and other references are listed on pages 811 through 814

19 PEDIATRICS—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Emphasis
KENTUCKY													
Louisville													
St Joseph Infirmary	K Crawford	39	3,224	26	58	1,574	2	2	0	0	= 4	220-930	PM
University of Louisville Medical Center	A J Steigman		8,007			77,188	9	6	2	1	= 18	116 116	FM
Children's	J A Little												
Louisville General	W C Adams												
LOUISIANA													
New Orleans													
Charity Hospital of Louisiana													
Louisiana State University Unit	R I Fowler	100	1 802	90	85	9,960	9	7	0	0	= 16	125 150	FM
Tulane University Unit	R V Platou	99	1 724	66	88	8,949	8	8	0	0	= 16	125-150	FM
Shreveport													
Confederate Memorial Medical Center	C H Webb	90	2 869	175	30	3 229	2	2	0	0	= 4	125 150	FM
MAINE													
Portland													
Maine Medical Center	P G Good	16	781	23	74	1 743	1	1	0	0	= 2	175-900	
MARYLAND													
Baltimore													
Baltimore City Hospitals	H J Harrison	77	1,783	188	98	16 102	3	4	2	0	= 9	150-900	FP
Johns Hopkins	K J Cooke	80	1,898#	192	91	57,161	12	7	1	0	= 20	160 222	PM
Union Memorial													
Sinai	H H Gordon	18	1 015	30	70	13 259	2	2	2	0	= 6	130 300	FM
University	J J Bradley	57	1,350	133	65	28 659	4	3	1	0	= 8	200-950	PM
MASSACHUSETTS													
Boston													
Boston City	S S Gellis	150	2 853	119	82	30 797	9	8	2	0	= 19	158 248	FM
Boston Floating	J M Batx	76	3 116	111	86		6	6	0	0	= 12	279 294	0
Children's Hospital Medical Center [291]	C A Janeway	76	3,488	289	85	28 169	8*	9	7	2	= 26	167 167	FM
Massachusetts General	A M Butler					6,754	6	6	2	0	= 14	168-183	FM
Worcester													
St Vincent	P P Karpawich	51	3 675	15	87	668	1	1	0	0	= 2	175 200	FP
Worcester City	I Cohen	26	1 016	8	88	2 407	1	1	0	0	= 2	250 333	FM
MICHIGAN													
Ann Arbor													
University	I I Wilson	73	1 898	88	89	17,763	10	10	5	3	= 28	180 275	0
Detroit													
Children's	P V Wooley	99	4 327			55 979	13	13	1	0	= 27	200 300	FM
Harper	I I Martmer	32	1 539#	34	64	2 414	5	5	0	0	= 10	275 300	PM
Henry Ford	J V Johnston	30	1 555	19	79	24 617	5	3	0	0	= 8	265 365	PM
Flint													
Hurley	V Tuuri	69	4,294#	39	62	589	2	2	0	0	= 4	325-350	FM
Grand Rapids													
Butterworth	D F Waterman	39	3 010#	50	74	1 478	1	2	0	0	= 3	300-375	PM
Pontiac													
St Joseph Mercy	F Adams	45	3 762	28	78	2 832	1	1	0	0	= 2	375 425	PM
Saginaw													
Saginaw General	R M Heavenrich	24	1,756	19	84	1 208	1	1	0	0	= 2	365-415	PM
MINNESOTA													
Minneapolis													
Minneapolis General	R B Rank	38	1 348	46	76	7 623	3	1	0	0	= 4	235-275	FM
Northwestern	N Bench	28	1 779	42	81	44	1	1	0	0	= 2	225-250	FP
University of Minnesota Hospitals	J V Anderson	100	2 633	170	93	10,663	10	10	2	0	= 22	244 244	
Rochester													
Mayo Foundation [292]	J W DuShane		3 812	80	83		8	8	4	0	= 20	200 200	PM
MISSISSIPPI													
Jackson													
University of Mississippi Medical Center University	B Batson	19	731#	81	59	4 319	3	3	0	0	= 6	250 400	0
MISSOURI													
Columbia													
University of Missouri Medical Center	R Jackson	39	867	41	80	5,270	3	2	1	0	= 6	200-300	
Kansas City													
Children's Mercy	H C Miller		1 942			32 135	4	4	1	0	= 9	175 200	FM
Kansas City General	C W Seely	26	1 504	43	51	7 111	2	2	0	0	= 4	220 240	PM
St Louis													
Homer G Phillips	P J White	82	3 074	31	81	16 777	9	7	4	0	= 20	231 299	
St Louis Children's	A F Hartmann Sr	129	4 905	156	92	41 820	14	8	8	0	= 30	175-375	FP
St Louis City [290]	J T Y Shen	56	2 600	50	83	15 369	6	4	2	0	= 12	231 299	PM
St Mary's Group of Hospitals of St Louis University Cardinal Glennon Memorial Hospital for Children	J P King	56	2 463	57	86	19,150	4	4	0	0	= 8	150 170	FM
NEBRASKA													
Omaha													
Children's Memorial	C R Angle	57	4 298	64	81	5,964	4	4	0	0	= 8	275 475	PM
Creighton Memorial-St Joseph	J H Murphy	38	2 040	17	53	1 258	2	0	1	0	= 3	210 260	FP
University of Nebraska	G Gibbs	17	547	15	73	7,397	2	2	1	0	= 5	225 300	PM
NEW HAMPSHIRE													
Hanover													
Mary Hitchcock Memorial	C C Stewart	23	1 595	30	100	4 825	1	1	0	0	= 2	218 218	
NEW JERSEY													
Jersey City													
Jersey City Medical Center	S S Stevenson	52	2 065	23	25	8,118	3	2	1	0	= 6	108-200	FM
Neptune													
Pitkin Memorial	J F Raffetto	23	1,642	19	58	753	1	1	0	0	= 2	250 250	FM

Numerical and other references are listed on pages 811 through 814

19 PEDIATRICS—Continued

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NEW JERSEY—Continued													
Newark													
Newark Beth Israel	A Hoyman	38	1 725	13	31	801	1	1	0	0	= 2	125-175	FM
St Michael	C A Maggio	55	2 830	34	88	5 461	3	2	0	0	= 5	150-215	FM
United Hospital of Newark Babie	F C Dower		8 969	34	85	11 366	4	4	1	0	= 9	275-325	O
NEW MEXICO													
Albuquerque													
Bernalillo County Indian	D Frost	24	723	23	56	2 347	2	1	0	0	= 3	300 400	FP
NEW YORK													
Albany													
Albany	P Patterson	57	1 256#	45	89	3 301	4	4	1	0	= 9	195 275	PM
Buffalo													
Children	M F Rubin	96	4 172	182	88	43 000	13	7	1	0	= 21	125 175	PM
Edward G Meyer Memorial	E S Bumbaio	47	1 498	21	81	9 121	2	2	0	0	= 4	292 312	PM
Cooperstown													
Mary Imogene Bassett	E C Goodwin	[illegible]	302	19	95	7 362	1	0	0	0	= 1	200-350	PM
Hempstead													
Meadowbrook	J A Stanchi	63	2 003	45	78	2 752	3	3	0	0	= 6	275 275	PM
Johnson City													
Charles S Wilson Memorial	A M Coddington	34	2 [illegible]28	11	64	[illegible] 600	1	1	0	0	= 2	225 300	PM
Manhasset													
North Shore	A I Florman	35	1 190#	9	89	625	2	1	0	0	= 3	200 250	FP
New York City													
Bellevue Hospital Center Div III New York University College of Medicine	J L Holt Jr	150	1 000	115	50	120 000	10	7	2	0	= 19	145 195	
Beth El	B Schick	35	356	61	98	1 871	2	1	0	0	= 4	150 200	FM
Beth Israel	I Cohen	10	813	11	36	2 887	1	1	0	0	= 2	175-180	PM
Bronx	M Davidson	19	741	8	88	7 565	3	3	0	0	= 6†	145-195	FM
Bronx Municipal Hospital Center	H F Barnett	60	1 757	40	80	41 850	12	7	1	0	= 20†	215 215	FM
Brooklyn	F M Lamb	37	1 260	12	75	10 759	2	2	0	0	= 4	175 190	FM
City Hospital at Elmhurst	F F Amerman	49	1 493	21	63	7 938	3	2	0	0	= 5	145 195	
Coney Island	I Rosenblum	23	875	25	60	6 362	2	2	0	0	= 4	145 195	
Cumberland	M M Mulliner	37	1 337	16	57	16 069	2	2	0	0	= 4	145 195	
Fordham	J Colomb	18	676	18	80	5 939	2	1	0	0	= 3	145 195	
Harlem	H J Cohen	60	897	27	70	20 412	2	2	0	0	= 4	145 195	
Jewish	I Pincus		1 771	46	64	10 425	6	6	0	0	= 12	100 125	FM
Kings County Hospital Center	R J Day	127	2 913	344	44	22 145	10	10	2	0	= 22	145-195	
Lenox Hill	C O Regan	21	782	13	92	5 358	1	1	0	0	= 2	180 200	PM
Lincoln	H F Barnett	40	1 310	179	70	14 422	7	4	0	0	= 11	145 195	FM
Long Island College	C A Weymuller	13	571	13	38	[illegible] 837	2	1	0	0	= 3	164 191	PM
Long Island Jewish	S Karelitz	48	2 447	89	89	2 214	1	3	1	0	= 5†	100 165	FM
Lutheran Medical Center	J A Monfort	18	993	33	76	1 510	2	2	0	0	= 4	135 185	FM
Maimonides	B Kramer	42	1 885	23	65	1 937	4	2	0	0	= 6	75-150	FM
Methodist	W R Coles	14	541	11	45	2 772	1	1	0	0	= 2	175 200	FP
Morrisania City	J J Chick	22	705	62	87	7 492	2	2	0	0	= 4	145 195	
Mount Sinai	H J Rode	105	2 952	115	81	24 005	[illegible]	[illegible]	1	0	= 11	100 100	FM
New York	S Z Levine	82	1 934	157	88	28 017	8	6	2	1	= 17	164 263	PM
New York Infirmary	B Worcester	18	316	2	50	5 [illegible]80	2	1	0	0	= 3	150 175	FM
New York Medical College Metropolitan Medical Center	I B Slobody												
Flower and Fifth Ave Hospitals		3	8	20	55	[illegible]50	2	2	0	0	= 4	125-175	FM
Metropolitan		17	800	55	69	11 506	7	7	0	0	= 14	145-195	FM
New York Polyclinic Medical School and Hospital	A B Susman	6	214	4	75	5 090	1	1	0	0	= 2	150 175	
Presbyterian (Babies)	R McIntosh	35	6 [illegible]	237	81	44 [illegible]	9	8	3	1	= 21	250-417	PM
Queens Hospital Center	M Cox	65	1 437	11	3	881	1	3	0	0	= 7	145-195	
Roosevelt	L N Joyner	10	6 2[illegible]	6	3	6 3[illegible]	2	2	1	0	= 5	158 275	PM
St Catherine	J F Foulard	20	6 [illegible]	21	4	5 [illegible]	2	1	0	0	= 3	125 150	PM
St John's Episcopal	B H Shulman	14	2 167#	44	9	5 [illegible]	1	1	0	0	= 2	175 210	FM
St Luke's	J J Lyle		1 710	23	67	9 750	3	3	0	0	= 6	125 150	FM
St Mary's	A C Stighano	7	89	12	50	2 660	1	1	0	0	= 2	200 225	FM
St Vincent's	A J Vignec	8	1 121	5	68	13 181	3	2	0	0	= 5	175 200	FM
Rochester													
Rochester General	J H Townsend Jr	30	815	22	86	1 651	2	2	0	0	= 4	175 200	FP
St Mary's	J Martin					1 [illegible]6	1	1	0	0	= 2	250 325	PM
Strong Memorial Rochester Municipal	W F Bradford	45	1 [illegible]5#	5	85	11 0[illegible]5	7	2	2	0	= 11	160 291	O
Syracuse													
State University of New York Upstate Medical Center	J Richmond	80	1 [illegible]16	[illegible]	71	11 [illegible]	6	6	2	0	= 14	250 316	O
Valhalla													
Grasslands	D A Wilcox	20	407	50	63	1 478	1	1	1	0	= 3	175 225	PM
NORTH CAROLINA													
Chapel Hill													
North Carolina Memorial	J C Cannon	45	1 [illegible]4	122	81	[illegible]	4	3	2	0	= 9	175 [illegible]	O
Charlotte													
Charlotte Memorial	C C Watkins	7	441#	7	85	6 324	1	1	0	0	= 2	250 315	PM
Durham													
Duke	J S Harris	37	1 447	100	[illegible]	10 [illegible]	12	6	3	0	= 21	43 200	PM
Raleigh													
Rex	C R Burk	35	2 [illegible]	21	38	1 009	1	1	0	0	= 2	350 350	O
Winston Salem													
North Carolina Baptist	W M Kelly	3	1 372#	85	61	1 171	4	3	1	0	= 8	160 266	PM
OHIO													
Akron													
Mary Day Nursery and Children's	J H Walker	68	4 724	81	82	7 793	7	7	1	0	= 15	275 425	FP
Cincinnati													
University of Cincinnati College of Medicine Hospital Group	A A Weech												
Children's		170	9 913	163	90	12 682	12	12	1	0	= 25	100 175	FM
Cincinnati General													

Numerical and other references are listed on pages 811 through 814

19 PEDIATRICS—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Affiliate
OHIO—Continued													
Cleveland													
Cleveland Clinic	R D Mercer	16	801	24	63	6 369	2	2	0	0	= 4	275-275	FM
Cleveland Metropolitan General [75 308]	F C Robbins	67	1 669	58	81	31,718	5	5	2	0	= 12	150-217	FM
St Luke's	R G Hodges	22	1,241	36	72	7,066	1	2	0	0	= 3	200-235	FM
University Hospitals of Cleveland	W Wallace	81	3 271	146	74	17 510	5	4	2	0	= 11	150-250	PM
Columbus													
Children's	F H Baxter	160	6,900			35 000	11	11	3	0	= 25	175-200	PM
OKLAHOMA													
Oklahoma City													
University of Oklahoma Medical Center University Hospitals [321]	H D Riley	80	1 538	113	74	12 026	7	7	0	0	= 14	200-215	PM
Tulsa													
Hillcrest Medical Center	I Horowitz	15	636	6	83	3,258	2	1	0	0	= 3	200-300	FM
St John's	M H Donovan	73	5 067	43	58	1 152	1	1	0	0	= 2	175-225	FP
OREGON													
Portland													
University of Oregon Medical School Hospitals and Clinics	A I Hill Jr	53	1 395	90	84	18 144	4	4	0	0	= 8	165-215	FM
PENNSYLVANIA													
Danville													
George F Geisinger Memorial	S S Morrison	16	650	19	68	7 466	2	0	0	0	= 2	175-225	FM
Harrisburg													
Harrisburg	R I Pursky		2,479	31	55	4 915	1	1	0	0	= 2	250-250	FP
Harrisburg Polyclinic	M Ames	58	3 177	30	73	6 300	1	1	0	0	= 2	250-350	FM
Philadelphia													
Albert Einstein Medical Center	N Capper	58	2 685	22	46	3 506	2	1	0	0	= 3	125-200	FM
Children's	J Stokes Jr	60	6 009	95	89	15,474	9	9	3	1	= 22	50-200	PM
Germantown Dispensary and Hospital	J C Williams	10	1 299	4	25	3 805	1	1	0	0	= 2	175-200	FM
Hahnemann Medical College and Hospital [332]	C C Fischer	30	1,103	30	57	5,604	4	4	0	0	= 8	75-75	FM
Hospital of the University of Pennsylvania	I Barness	13	512	38	66	9 550	3	0	1	0	= 4	50-900	PM
Hospital of the Woman's Medical College of Pennsylvania	E L Miller	22	742	9	67	3 246	1	1	1	0	= 3	125-175	FM
Jefferson Medical College [33]	H G Keitel	11	391	16	50	10,208	2	5	0	0	= 7	100-150	PM
Philadelphia General	P Gyorgy	156	3 154	57	80	27 032	6	6	0	0	= 12	128-212	FM
Temple University Hospitals St Christopher's Hospital for Children Temple University	W E Nelson	85	4 013	103	91	57 788	10	10	3	0	= 23	75-300	FM
Pittsburgh													
Allegheny General	I W Leech	21	681	26	69	3 629	1	1	0	0	= 2	200-225	FM
Health Center Hospitals of the University of Pittsburgh School of Medicine Children's	W H Borges		1 626			19 317	10	8	2	0	= 20	125-200	FM
Sayre													
Robert Packer	D S Motsay	37	2 675	24	80	3 199	1	1	0	0	= 2	235-275	PM
PUERTO RICO													
Caparra Heights													
University	A Ortiz	47	1 577	174	50	1 526	2	3	0	0	= 5	250-350	FM
Ponce													
Ponce District													
San Juan													
San Juan City	A Ortiz	74	1 552	129	66	13,375	5	5	1	0	= 11	175-375	FM
RHODE ISLAND													
Providence													
Rhode Island	B Feinberg	45	1 760	27	59	6,979	3	2	0	0	= 5	125-175	FM
SOUTH CAROLINA													
Charleston													
Teaching Hospitals of the Medical College of South Carolina Medical College Roper	I R Paul Jr	76	3 438	109	48	10 446	3	3	1	0	= 7	138-168	FM
Columbia													
Columbia	H W Moore	90	4 968	46	59		1	1	0	0	= 2	200-200	FP
TENNESSEE													
Knoxville													
University of Tennessee Memorial Research Center and Hospital [117]	H S Christian	17	673	25	40	1 471	1	1	0	0	= 2	330-340	FM
Memphis													
City of Memphis Hospitals	F T Mitchell		2 085	146	70	2 816	5	5	2	0	= 12	150-200	FP
Nashville													
Baptist	I M Strayhorn	31	1 911	33	36	357	2	1	0	0	= 3	300-300	FM
George W Hubbard [351]	E P Crump	24	845	14	71	10 695	1	3	0	0	= 4	125-200	FM
Vanderbilt University	A Christie	28	909	60	62	12,562	4	2	0	0	= 6	100-125	FM
TEXAS													
Corpus Christi													
Driscoll Foundation Children's	J M Sloan	99	1 195	89	91	43 608	2	4	0	1	= 7	200-300	FP
Dallas													
Children's Medical Center	E Pratt	87	4 188	73	76	58 246	8	8	2	0	= 18	150-200	FM
Galveston													
University of Texas Medical Branch Hospitals	H Stoeckle	48	1,053	111	61	18,365	7	7	0	0	= 14	160-160	FP
Houston													
Baylor University College of Medicine Affiliated Hospitals													
Hermann	R J Blattner	19	769	39	87	12,597	3	3	0	0	= 6	125-150	FM
Jefferson Davis	R J Blattner	51	1 458	226	54	46 622	6	6	0	0	= 12	125-165	FM
Methodist	E B Brandes		91	1	100		1	1	0	0	= 2	100-175	FM
Texas Children's	R J Blattner	33	2 363	81	86	1 677	3	4	0	0	= 7	100-125	FM

Numerical and other references are listed on pages 811 through 814

19 PEDIATRICS—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961-1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min	Stipend Per Month: Max	Main Emphasis F-M P-M O
TEXAS Houston Continued														
St Joseph's	R H Hardie	93	3 817	17	82	2 323	1	1	0	0	= 2	220	245	PM
San Antonio														
University of Texas Postgraduate School of Medicine Affiliated Hospitals														
Robert B Green Memorial	C B Alexander	40	877	85	4	9 148	3	3	0	0	= 6	150	250	F-M
Santa Rosa	M J Thornton	60	3 180	119	63	602	2	0	0	0	= 2	150	200	P
UTAH														
Salt Lake City														
Salt Lake County General	M F Tabby	22	8 2	38	76	12 341	3	4	0	0	= 7	220	300	O
VERMONT														
Burlington														
University of Vermont Affiliated Hospital														
DeGoesbriand Memorial	J Lucey	11	664#	8	100	2 500						208	208	
Mary Fletcher	R J McKay Jr	9	8	20	90	480	2	1	0	0	= 3	104	104	O
VIRGINIA														
Alexandria														
Alexandria	R Anderson	11	180#	9	40	2 [illegible]	1	0	0	0	= 1	27	150	PM
Charlottesville														
University of Virginia	W W Waddell Jr	15	917	45	3	3 663	3	2	0	0	= 5	75	140	F-M
Richmond														
Medical College of Virginia Hospital Division	C M McCune	6	1 356	120	52	1 644	8	4	2	0	= 14	100	150	F-M
WASHINGTON														
Seattle														
University of Washington Affiliated Hospital														
Children's Orthopedic	R Aldrich	72	1 122#	107	96	12 000	4	4	2	0	= 10	180	300	PM
King County Hospital Unit No 1 (Harborview)	R A Aldrich	38	770#	22	91	4 702	8	8	4	0	= 20	150	245	F-M
University	R V Aldrich		8#	1	100	601	10	10	4	0	= 24	180	300	F-M
WEST VIRGINIA														
Beckley														
Beckley Memorial	S J Winter	8	60	6	83	10 600	1	1	0	0	= 2	100	150	F-M
Charleston														
Memorial	F C Lotterhoff	23	1 091	27	51	1 101	1	1	0	0	= 2	250	275	F-P
WISCONSIN														
Madison														
University Hospital	N J Smith	37	1 423	43	81	7 150	4	4	4	0	= 12	100	250	F-M
Milwaukee														
Milwaukee Children	E J Mellenkamp	90	4 120	70	92	1 [illegible] 00	6	[illegible]	0	0	= 11	240	295	
Milwaukee County	F C Peterson	4	2 [illegible]	72	48	3 [illegible] 8	1		0	0	= 6	250	282	

Residency programs in the following hospitals have been approved by the Council the American Academy of Pediatrics and the American Board of Pediatrics through the Residency Review Committee for Pediatrics as offering full training of two years duration through affiliation with a fully approved program

Hospitals 42 Residencies 83

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961-1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min	Stipend Per Month: Max	Main Emphasis F-M P-M O
NONFEDERAL AND VETERANS ADMINISTRATION														
CALIFORNIA														
Long Beach														
Memorial Hospital of Long Beach**	M E Buecker	1	1 484	15	26	3 319	1	0	0	0	= 1	92	97	PM
San Diego														
San Diego County General	H C Kellogg		74	24	62	346	1	1	0	0	= 2	250	300	F-M
San Francisco														
Mount Zion	S J Robinson		1 [illegible]#	10	86	[illegible]	0	1	0	0	= 1	150	250	F-M
San Mateo														
Community Hospital of San Mateo County	W C Eastman	12	48	12	50	2 [illegible]								
CONNECTICUT														
Waterbury														
Waterbury**	J H Root Jr	1	2 434	5	100	[illegible] 474	1	1	0	0	= 2	[illegible]	250	F-M
FLORIDA														
Miami														
Variety Children**	J Carson		2 784	1	76		4	4	0	0	= 8	200	225	F-M
GEORGIA														
Atlanta														
Henrietta Egleston Hospital for Children	J H Patterson	24	807	15	73		1	1	1	0	= 3	20		F-M
ILLINOIS														
Chicago														
Grant	D H Welker	[illegible]	1 204	9	80	1 [illegible]	1	1	0	0	= 2	22	250	
Illinois Masonic**	F Arenson	30	2 21	12	42	4 [illegible]	1	0	0	0	= 3	17	[illegible]	F-M
Evanston														
Evanston	A J Newcomb	48	1 [illegible]	14	79	3 605	2	0	0	0	= 2	22		F-M
Peoria														
St Francis**	R S Euston	128	7 513	73		2 [illegible]	1	1	0	0	= [illegible]	22	250	F-M

Numerical and other references are listed on pages 811 through 814

19 PEDIATRICS—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Affiliation
LOUISIANA													
New Orleans													
Hotel Dieu	H Tolmas	27	2 282	5	60	1 181	1	1	0	0	= 2	225 250	FP
Ochsner Foundation	H B Chalstrom	20	2 094	12	100		1	1	0	0	= 2	225 275	PM
Southern Baptist [181]	S Schaefer		910			5 564	1	1	0	0	= 2	175 150	FP
Touro Infirmary													
MAINE													
Lewiston													
Central Maine General [185]	H C Thacher	11	514	8	38	616	0	1	0	0	= 1	175 210	FP
MARYLAND													
Baltimore													
Mercy	I B Smith	14	406	18	72	3 664	1	1	0	0	= 2	275 275	PM
Provident [186]	C Campbell	21	796	21	86	2 447	2	2	0	0	= 4	225 250	FM
MASSACHUSETTS													
Springfield													
Springfield	H H Shuman	35	2 441	14	86	1 077	1	1	0	0	= 2	195 225	FP
MICHIGAN													
Detroit													
Herman Kiefer [18]	C Whitten	84	3 475	62	89	5,097	2	0	0	0	= 2	375-400	PM
Receiving [21]													
NEW JERSEY													
Camden													
Cooper [243]	R M Bernardin	26	2 771	21	90	2 951							
Long Branch													
Monmouth Medical Center [240]	M Quirk	29	956	13	85	421	1	1	0	0	= 2	200 200	FM
Trenton													
St Francis [245]	H Davis	62	4 903	45	53	2 150	1	1	0	0	= 2	210-210	FM
NEW YORK													
New York City													
Flushing Hospital and Dispensary [277]	H T Vogel	24	660	22	82	3 123	1	1	0	0	= 2	175 900	FM
Mary Immaculate [ ]	V G Tosti		610#	8	50	1 130	1	1	0	0	= 2	170 180	FM
Misericordia [ ]	V P Casey	18	650	40	73	744	2	1	0	0	= 3	150 175	FM
Wyckoff Heights [ ]													
Rochester													
Genesee	R Meltzer	21	1 925	6	100	2 710	1	1	0	0	= 2	175 325	FM
NORTH CAROLINA													
Durham													
Watts Hospital	A H London	15	1 085	7	43	3 760	1	1	0	0	= 2	300 350	FM
Wilmington													
Babies [302]	I B Sidbury	25	2 062	11	7	4,015	2	0	0	0	= 2	300 300	FM
OHIO													
Cincinnati													
Good Samaritan [146]	J E Ghory	50	3,300	25	60	1 100	1	1	0	0	= 2	250 275	FM
Jewish [30]	I S Friedman	27	2 211	5	60	2 235	1	1	0	0	= 2	195 215	FP
Cleveland													
Mount Sinai	F I Smith	12	604	18	61	3 566	2	2	0	0	= 4	215 225	FM
Toledo													
Mercy [212]	J J Tansey	36	2 734	13	77	5 231	1	1	0	0	= 2	275-275	FM
Warren													
Trumbull Memorial	R P Ostergard	25	2 303	9	78		1	1	0	0	= 2	300 400	FP
RHODE ISLAND													
Providence													
Charles V Chapin [204]	M Adelman	60	1 176	5	60	563	2	0	0	0	= 2	150 150	FM
SOUTH CAROLINA													
Greenville													
Greenville General	E Furman	31	1,540#	36	41	4 742	0	1	0	0	= 1	300 300	0
TENNESSEE													
Chattanooga													
T C Thompson Children's [148]	R I Miller	73	3 562	128	18	26 897	1	1	0	0	= 2	325 350	FM
Memphis													
Baptist Memorial [ ]	G S Lovejoy	39	2 767	38	47	928	1	1	0	0	= 2	325-350	PM
Methodist [ ]	C H Housholder		808	13	31		1	1	0	0	= 2	325-350	FM
St Joseph [ ]	H Jacobson	18	1 400	9	40	1 592	1	1	0	0	= 2	325 350	FM

PEDIATRIC ALLERGY

Residency programs in the following hospitals have been approved for TWO years of training by the Council, the American Academy of Pediatrics, the American Board of Pediatrics, and the Sub Specialty Board of Pediatric Allergy, through the Residency Review Committee for Pediatrics (Applicants intending to qualify for examination by the Sub-Specialty Board of Pediatric Allergy of the American Board of Pediatrics, should refer to the Board requirements and the explanatory footnote (*) on "Mixed," "Adult" and "Pediatric" categories below)

Hospitals, 26, Residencies, 35

	Chief of Service	Inpatients Treated	Outpatient Visits	% of O P D Visits (Pediatric)	Total Residencies Offered	Residencies Stipend (Min Max)
CALIFORNIA						
Los Angeles						
University of California	E M Heimlich	26	1 564	100	2	
San Francisco						
University of California	W Deamer T Nelson	70	3 000	100	2	30

Numerical and other references are listed on pages 811 through 814

PEDIATRIC ALLERGY—Continued

	Chief of Service	Inpatients Treated	Outpatient Visits	% of O P D Visits (Pediatric)	Total Residencies Offered	Beginning Stipend (Month)
COLORADO						
Denver						
University of Colorado Medical Center						
Colorado General	M F Smelzer	82	2 791	18	3	300
Denver General	M F Smelzer	30	425		0	
DISTRICT OF COLUMBIA						
Washington						
Children s	R H Todd	173	2 641	100	2	350
ILLINOIS						
Chicago						
Michael Reese	M Mosko A Matheson	68	2 317	100	1	175
University of Illinois Research and Educational Hospitals	J S Hyde	46	2 346	100	1	250
KANSAS						
Kansas City						
*University of Kansas Medical Center—Children s Mercy	F Speer	37	3 541	70	1	300
MARYLAND						
Baltimore						
*John Hopkins	R E Cooke	74	6 154	100	2	300
University	R J London		3 452	50	2	200
MASSACHUSETTS						
Boston						
Children Hospital Medical Center	H L Mueller	108	3 285	100	1	300
Massachusetts General	E C Lowell	50	11 000	20	1	375
MICHIGAN						
Detroit						
Children s	S J Levin	100	8 000	100	1	250
MINNESOTA						
Rochester						
*Mayo Foundation	C B Logan	Combined 700		100	1	200
NEW YORK						
Buffalo						
Children s	V J Cohen				1	125
New York City						
New York University Medical Center	V J Fontana				1	333
*Roosevelt	R A Cooke	254	34 978	40	3	275
Rochester						
*Strong Memorial-Rochester Municipal	J Glaser	87	2 125	15	3	417
NORTH CAROLINA						
Durham						
Duke	S Dee				2	205
OHIO						
Columbus						
Children s	J Sivon				2	250
PENNSYLVANIA						
Philadelphia						
Children s	H J Peck		2 488	100	1	200
RHODE ISLAND						
Providence						
*Rhode Island	S S Freedman				1	175
TENNESSEE						
Memphis						
City of Memphis (Frank Tobey Memorial Children s)	J V Crawford	128	2 350	100	1	300
TEXAS						
Dallas						
Children s Medical Center	S R Halpern	100	3 550	100	1	417
Houston						
Texas Children s	J E McGovern	133	3 345	34	2	420
WISCONSIN						
Madison						
*University Hospitals	S B Crepea	191	9 235	51	1	200

* The total residency programs in Allergy at these centers also include Adult Allergy Accordingly residency programs in centers with the symbol (*) are in the Mixed category referred to under Board Requirements Reference should also be made to the listing of hospitals approved in Allergy on page 615 Residency programs in these hospitals are in the Adult category referred to under Board Requirements All other residency programs listed above under Pediatric Allergy are in the Pediatric category referred to on this page

20 PHYSICAL MEDICINE AND REHABILITATION

Residency programs in the following hospitals have been approved by the Council and the American Board of Physical Medicine and Rehabilitation through the Residency Review Committee for Physical Medicine and Rehabilitation as offering acceptable training in the specialty

Hospitals 73 Residencies 294

	Chief of Service or Program Director	Number of Patients Treated	Number of Treatments	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min	Max	Maintenance FM PM O	Length of Approved Program (Years)
UNITED STATES ARMY													
CALIFORNIA													
Letterman General San Francisco	W H Moore Jr	3,390	86 436	2 404	1	1	1	0	= 3			FM	3

Numerical and other references are listed on pages 811 through 814

20 PHYSICAL MEDICINE AND REHABILITATION—Continued

	Chief of Service or Program Director	Number of Patients Treated	Number of Treatments	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Maintenance	Length of Approved Program (Years)
DISTRICT OF COLUMBIA												
Walter Reed General, Washington	A Mastelone	127 617	180 499	11,098	1	1	1	0 =	3			3
NONFEDERAL AND VETERANS ADMINISTRATION												
ALABAMA												
Tuskegee												
Veterans Admin	F R D Paula	1 446	2 050	10	1	1	1	0 =	3	275-345	0	3
CALIFORNIA												
Los Angeles												
Los Angeles County	I Austin	4,776	24 470		1	1	0	0 =	2	273-303	PM	3
University of California	R F Worden	1,750	13 039	6 490	3	3	3	0 =	9	240-314	FPO	3
Veterans Admin	K H Haase	11 160	105 876	3 910	4	4	4	0 =	12	271 348	PM	3
White Memorial [13]	I B Moor		22 826		1	0	1	0 =	2	215-235	PM	3
San Francisco												
University of California Hospitals	C Bard	14 513	20 059	7 986	0	2	1	0 =	3	283 308		3
Vallejo												
Kaiser Foundation												
California Rehabilitation Center												3
COLORADO												
Denver												
University of Colorado Medical Center												
Colorado General	J W Gersten	2 746	32 012	18 162	2	2	2	0 =	6	180 205	0	3
Veterans Administration	C C Hoffman	105	130		0	1	1	0 =	2	271 347	0	
CONNECTICUT												
New Haven												
Yale-New Haven Medical Center												
Grace-New Haven Community	I I Hines	1 791	30 699	7 858	1	1	0	0 =	2	50-125	0	3
Rocky Hill												
State of Connecticut												
Veterans Home and Hospital	H Kamenetz	2 749	85 356		1	1	1	0 =	3	409-470	0	3
DISTRICT OF COLUMBIA												
Washington												
District of Columbia General	J Buchanan	8 813	74 782	7 637	2	2	0	0 =	4	233 258	0	3
Georgetown University	C D Shields	2 038	8 381	1 475	1	1	1	0 =	3	200 200	FM	3
George Washington University	C S Wise	16 000	31 600	2 500	1	1	1	0 =	3	210-260	PM	3
FLORIDA												
Coral Gables												
Veterans Administration	W C Fleming	3 168	39 384	539	2	2	2	0 =	6	271 420	0	3
GEORGIA												
Warm Springs												
Georgia Warm Springs Foundation-Emory University	K I Bennett F D Hank	3 853	135 722	6 963	4	4	4	0 =	12	245-400	PM	3
ILLINOIS												
Chicago												
Northwestern University Medical Center												3
Veterans Admin Research	I B Newman	1 011	52 059		2	2	2	0 =	6	271-462	0	
University of Illinois Affiliated Hospitals												3
Illinois Research and Education												
Michael Reese	I I Gordon	5 932	32 813		1	0	0	0 =	1	125 125	FP	
Veterans Administration (West Side)	I Schwartz	4 220	97 255	4,823	1	0	0	0 =	1	270 347	0	
Hines												
Veterans Admin	W Liberson	3 481	259 968		8	0	0	0 =	8	271-412	0	3
Peoria												
Institute of Physical Medicine and Rehabilitation [31]	D C Oak	1 631	54 220	11 175	1	1	0	0 =	2	375-425	0	3
KANSAS												
Kansas City												
University of Kansas Medical Center	D Rose	2 536	35,957	3 706	1	1	1	0 =	3	125-300	PM	3
Veterans Admin (Kansas City Mo)	R R Beatty	2 869	51 614					=	1	271 271	0	
Wadsworth												
Veterans Admin Consolidated Center												3
KENTUCKY												
Louisville												
University of Louisville Medical Center												3
Louisville General	R O McMorris	2 062	17 222	17 222	3	0	0	0 =	3	141 166	FM	
MASSACHUSETTS												
Boston												
Massachusetts General	A L Watkins		30 615							108 183	FM	3
Veterans Admin (Jamaica Plain) [203]	F Friedland	2 918	136 480	67	1	1	1	0 =	3			3
MICHIGAN												
Ann Arbor												
University [208]	I W Rae Jr	8 596	34 123	34,123	2	2	2	0 =	6	180 250	0	3
MINNESOTA												
Minneapolis												
Elizabeth Kenny Institute	M E Knapp	473	64 674	3,640	1	1	1	0 =	3			3
University of Minnesota Affiliated Hospitals												3
University Hospitals	F J Kottke	3 220	122 598	2 163	3	3	3	2 =	11	244 214		
Veterans Admin	B S Troedsson	6,776	127,508		1	1	0	0 =	2	271-462	0	
Rochester												
Mayo Foundation [222]	F C Elkins	13 412	106 304		3	3	3	0 =	9	200 200	PM	3

Numerical and other references are listed on pages 811 through 814

20 PHYSICAL MEDICINE AND REHABILITATION—Continued

	Chief of Service or Program Director	Number of Patients Treated	Number of Treatments	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Maintenance FM PM O	Length of Approved Program (Years)
NEW HAMPSHIRE												
Hanover												
Mary Hitchcock Memorial	R M Krout	1 568	50 938		1	1	1	0	= 3	218 273		3
NEW JERSEY												
East Orange												
Veterans Admin	C R Brooke	2 125	117 214		0	3	1	0	= 4	270 462		3
NEW YORK												
Albany												
Veterans Admin	I Ehrlich	1 569	100 629	811	0	0	1	0	= 1	271-347	O	3
New York City												
Bellevue Hospital Center [66]												3
Div III—New York University College of Medicine	H A Rusk	5 464	184 817	39 9	3	2	1	0	= 6	145 195		
Hospital for Joint Diseases	A S Russek	1 925	19 562	7 778						80 80	PM	
Bronx Municipal Hospital Center	A S Abramson	6 215	98 874		3	3	3	2	= 11†	215	FM	3
Coney Island	S G Feuer	524	8 790	5 528	2	2	2	0	= 6	145-195		3
Goldwater Memorial	M Dacso	2 967	97 262		6	3	0	0	= 9	145-195		3
Jewish Chronic Disease	I B Rogoff	472	99 568	10 793						200-250	FM	3
Kings County Hospital Center	J G Benton	7 038	91 700	28 817	1	1	0	0	= 2	145 195		3
Montefiore	K Harpuder	1 060	50 019		1	1	1	0	= 3	207 282	PM	3
Mount Sinai	L Wisham	10 451	54 410	20	1	0	0	0	= 1	100 100	FM	3
New York Medical College—Metropolitan Medical Center												3
Bird S Coler Memorial Hospital and Home	J Tobis	992	89 846		7	0	0	0	= 7	145-195		
Metropolitan	J Tobis	2 663	55 551	11 173	1	1	1	0	= 3	145-195	FM	3
Presbyterian	R C Darling	55 268	93 360	55 268					= 5	308 308	PM	3
Veterans Admin (Bronx)	A Lbel	4 668	328 022	145	2	2	2	0	= 6	270 824	O	3
Veterans Admin (Brooklyn)	H H Samberg	1 938	110 497		2	2	2	0	= 6	271 347	O	3
Veterans Admin (Manhattan)	B Stoll	4 392	303 480	1 517	1	1	0	0	= 2	271 348	O	3
NORTH CAROLINA												
Durham												
Veterans Admin	H T Zankel	1 358	48 566		1	1	0	0	= 2	270 462	O	3
OHIO												
Cleveland												
Cleveland Clinic	P A Nelson		96 317		1	0	0	0	= 1	275 300		3
Highland View-Cuyahoga County	M Peszczynski	3 678	96 315		4	4	4	0	= 12	240 295	PM	3
Columbus												
Ohio State University Hospitals University Hospitals	F D Johnson R D Burk	2 015	41 924	17 131	3	3	3	0	= 9	177 252	PM	3
Dayton												
Veterans Admin	I Rosenberg	1 561	131 955	263	2	0	0	0	= 2	271 347	O	3
OREGON												
Portland												
Veterans Admin	E W Fowlk	7 232	110 214	969	2	1	1	0	= 4	58 824		3
PENNSYLVANIA												
Philadelphia												
Hospital of the University of Pennsylvania	W Erdman	2 335	29 308	3 891	2	2	2	0	= 6	350 425	O	3
Philadelphia General	A A Martucci	10 703	179 106	23 343	2	2	2	0	= 6	318-388	FM	
Veterans Admin	R A Schlesinger	3 332	47 718	368	1	1	1	0	= 3	270-462	O	3
Pittsburgh												
Veterans Admin	M D Feckliner	6 151	195 822	722	1	0	0	0	= 1	270 347	O	3
PUERTO RICO												
San Juan												
Veterans Administration (San Patricio) [844]	H J Flax	669	24 256	3 300	2	0	0	0	= 2	318-408	O	3
TENNESSEE												
Memphis												
Veterans Administration	B B Sutton	2 409	171 070	298	1	0	0	0	= 1	271 347	PM	3
TEXAS												
Dallas												
Baylor University	E M Kruen	38 502	170 519	67 218	2	2	2	0	= 6	283 308	PM	3
Houston												
Baylor University College of Medicine Affiliated Hospitals Veterans Administration	J A Leavitt	12 921	193 830		3	3	3	0	= 9	270-347	PM	3
VIRGINIA												
Richmond												
Medical College of Virginia-Hospital Division	A R Dawson	11,315	85 274	2,856	2	2	2	0	= 6	100-150	FM	3
Veterans Administration	A R Dawson	796	210 000	756	2	2	2	0	= 6	271 112	PM	3
WASHINGTON												
Seattle												
University of Washington Affiliated Hospital King County Hospital No 1 (Harborview)	J Lehmann	1 119	39 794	378	1	0	0	0	= 1	150-150	FM	3
University	J F Lehmann				1	1	1	0	= 3	180 305	PM	
WISCONSIN												
Milwaukee												
Veterans Admin (Wood)	P A Dudenhoefer	3 518	260 220	1 565	2	1	0	0	= 3	271 347	PM	3

Numerical and other references are listed on pages 811 through 814

21 PLASTIC SURGERY

Residency programs in the following hospitals have been approved by the Council, the American Board of Plastic Surgery and the American College of Surgeons, through the Residency Review Committee for Plastic Surgery, as offering acceptable training in the specialty

Hospitals, 69, Residencies, 122

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Maintenance FM PM O	Length of Approved Program (Years)
UNITED STATES ARMY														
TEXAS														
Brooke General, San Antonio	F C Henry	28	317			1,421	1	1	1	1 =	4			1
UNITED STATES NAVY														
MARYLAND														
U S Naval Bethesda														1
NONFEDERAL AND VETERANS ADMINISTRATION														
CALIFORNIA														
Los Angeles														
University of California Medical Center														3
University of California	F I Ashley	7	567	1	50	1,272	1	1	1	0 =	3	240-314	FPO	
Veterans Administration	I L Ashley	1	239	1		413	0	0	0	1 =	1	348 463	PM	
Collis P and Howard Huntington Memorial (Pasadena)	G V Webster	3	271			101	1	0	0	0 =	1			
San Francisco														
Franklin	H M Blackfield		348	3	100		1	0	0	0 =	1	200-300	FM	2
St Francis Memorial	G W Pierce	12	828			360	1	1	1	0 =	3	300-350	PM	3
University of California Hospitals		2	76			294	0	1	0	0 =	1	316-316		2
H C Moffitt														
San Francisco General														
DISTRICT OF COLUMBIA														
Washington														
George Washington University	G S Letterman	15	653	8	62	626	1	1	1	0 =	3	210-285	PM	3
ILLINOIS														
Chicago														
Cook County	O H Stuteville	9	181			589	0	2	0	0 =	2	140 140	FM	3
University of Illinois Affiliated Hospitals	P W Greeley													2
Illinois Research and Educational Hospitals		11	269			1 300	0	0	0	1 =	1	245	PM	
Presbyterian-St Luke's		17	411	3	67		0	0	0	1 =	1	125-200	FM	
INDIANA														
Indianapolis														
Indiana University Medical Center	H M Trusler	40	572	5	60	3 120	1	1	1	0 =	3	225-300	PM	3
Veterans Administration	H M Trusler									=	1	271 462	O	
KANSAS														
Kansas City														
University of Kansas Medical Center	D Robinson	16	725	11	72	1 950	1	1	0	0 =	2	150 175	PM	2
MARYLAND														
Baltimore														
Johns Hopkins	M T Edgerton	21	576#	6	33	2,986	0	0	0	1 =	1	227 227	PM	3
MICHIGAN														
Ann Arbor														
St Joseph Mercy	R O Dingman	6	395			28	1	1	0	0 =	2	385 410	FM	2
Detroit														
Henry Ford	A P Kelly Jr	17	560	1	100	8 771	1	1	0	0 =	2	265 365	PM	3
Straith Memorial														
Grand Rapids														
Blodgett Memorial	W Steffensen	4	532	5	100	437	0	1	0	0 =	1	325 325	FM	3
MINNESOTA														
Rochester														
Mayo Foundation [229]	J B Lilch		2 812	19	80		4	4	0	0 =	8	200 200	PM	3
MISSISSIPPI														
Jackson														
University of Mississippi Medical Center	J H Hendrix Jr	8	193#	7	57	620	1	0	0	0 =	1	250 300	O	3
University		4	176#			56								
Veterans Administration														
MISSOURI														
Kansas City														
Kansas City General	F J McCoy	5	169	5		2 200	1	1	1	1 =	4	220 320	PM	2
St Louis														
Barnes	J B Brown	27	1,288	15	50	1 698	0	0	0	1 =	1	150	FM	3
St Mary's Group of Hospitals of St Louis University	F X Paletta		237	1	98	1 259	2	2	0	0 =	4	170 200	FM	2
NEW JERSEY														
Camden														
Cooper [50]	A W Von Deilen		45	1	100	173	1	0	0	0 =	1	200 250	FM	3
Newark														
St Barnabas Medical Center	L A Peer	12	572			767	1	1	1	0 =	3	175 225	FM	2
NEW YORK														
Albany														
Albany St Peter's	W B Macomber	18	619#	5	40	221	2	0	1	0 =	3	350-375	PM	2
Veterans Administration														

Numerical and other references are listed on pages 811 through 814

21 PLASTIC SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include Transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O	Length of Approved Program (Years)
NEW YORK—Continued														
Buffalo														
Roswell Park Memorial *	F S Hoffmeister	30	37[illegible]	11	100	2 022	0	0	1	1	= 2	3[illegible]0-381	O	1
Hempstead														
Meadowbrook	I R Rubin	26	498	9	22	381	1	1	0	0	= 2	275 275	FM	2
New York City														
Beth Israel	A I Barsky	4	273			107	1	1	0	0	= 2	175-190	PM	2
Columbia-Presbyterian Medical Center														3
Francis Delafield												145-195		
Presbyterian	G F Crikelair	Inc in Surg					0	0	2	2	= 4	283-308	PM	
Kings County Hospital Center	C R O Brien	37	713	22	10	3 690	1	2	0	0	= 3	145-195		2
Montefiore	M Lewin													2
Mount Sinai	A I Barsky	15	462			1 160	0	1	0	0	= 1	100-100	FM	3
New York Hospital-Cornell														
Medical Center	H Conway	14	485	1	100	1 800	0	0	1	1	= 2	206 263	PM	3
Veterans Admin (Bronx)	H Conway	24	625	1		260	1	2	0	0	= 3	347-462	O	
St Lukes	R B Stark						1	0	0	0	= 1	150-200	FM	2
Rochester														
Strong Memorial-Rochester Municipal	R M McCormack	12	413#	1	100	477	0	0	1	1	= 2	166-291	O	2
Syracuse														
State University of New York														
Upstate Medical Center	D B Stark	16	774	2	50	18	0	0	1	1	= 2	316 350	O	2
NORTH CAROLINA														
Durham														
Duke University Affiliated Hospitals	K Pickrell													3
Duke		42	1 095	12	25	2 413	0	2	2	2	= 6	43-200	FM	
Veterans Administration		18	260#	4	50		0	0	0	2	= 2	270-462	O	
OHIO														
Cincinnati														
Christ	I I Longacre	7	147				1	1	0	0	= 2	250-275	FM	2
Columbus														
Ohio State University Hospitals														2
University	B C Martin					300	0	1	1	1	= 3	202 277	PM	
OKLAHOMA														
Oklahoma City														
St Anthony	C H Kimball	11	421	4		354	0	1	0	0	= 1	300 350	FM	3
PENNSYLVANIA														
Allentown														
Allentown	K M Marcks	18	712	3	67	2 111	1	0	0	0	= 1	250-275	FM	2
Philadelphia														
Graduate Hospital of the University of Pennsylvania	P C Iverson	1	131			193	1	1	0	0	= 2	100-100	FM	2
Hospital of the University of Pennsylvania	H Royster	13	470			570	1	0	0	0	= 1	150-200		2
Pittsburgh														
Health Center Hospitals of the University of Pittsburgh School of Medicine	W White													2
Childrens														
Presbyterian-Womens		21	760	7	57					3	= 6	125-175	FM	
Veterans Administration														
Western Pennsylvania														
TENNESSEE														
Memphis														
City of Memphis Hospital	H Wilson		312	20	40									3
TEXAS														
Dallas														
Baylor University	J T Mill	10	909				1*	0	0	0	= 1	210 250	PM	2
Galveston														
University of Texas														
Medical Branch Hospitals	I G Blocker Jr	31	1 067	36	67	2 389	2	2	2	0	= 6	160 160	FP	3
Houston														
Baylor University College of Medicine														
Affiliated Hospitals														2
Jefferson Davis	S B Hardy	12	231	12	42	2 206	1	1	0	0	= 2	137 165	FM	
Methodist	S B Hardy	1	166	1	100							100-175	FM	
Texas Childrens	I D Cronin	3	197	1	100									
Veterans Admin	S B Hardy	19	308	6	50		1	1	0	0	= 2	412 462	PM	
San Antonio														
University of Texas Postgraduate School of Medicine	C W Tennison													3
Robert B Green Memorial		4	57			921	1	0	1	0	= 2	150 300	FM	
Santa Rosa		10	333			1 248	1	0	1	0	= 2	200 300	FP	
UTAH														
Salt Lake City														
Dr W H Groves Latter Day Saints	I R Broadbent	12	753	3	100	161	1	1	0	0	= 2	325-375	FP	2
VIRGINIA														
Charlottesville														
University of Virginia	C C Coleman Jr	19	490	2	50	995	1	1	0	0	= 2	75-200	PM	2
WISCONSIN														
Madison														
University Hospitals	W Slaughter	22	464	1	100	1,349	1	1	0	0	= 2	100-250	FM	2

Numerical and other references are listed on pages 811 through 814

22 PREVENTIVE MEDICINE

AVIATION MEDICINE

The following programs in Aviation Medicine have been approved by the Council and the American Board of Preventive Medicine, through the Residency Review Committee for Preventive Medicine, as offering acceptable training in the specialty

School	Location	Director		Length of Approved Program (Years)	Beginning Step [illegible]
UNITED STATES AIR FORCE					
School of Aviation Medicine Hq, Air Materiel Command	Wright Patterson Air Force Base, Ohio	W F Hall	For information regarding program, write to Chief, Medical Division Office Surgeon General U S A F Washington 25, D C	4[1] 1 (3d yr)	
School of Aviation Medicine	Brooks Air Force Base Texas	O O Benson, Jr	For information regarding program, write to Chief, Medical Division Office Surgeon General U S A F, Washington 25, D C	1 (2nd and 3d year)	
UNITED STATES NAVY					
School of Aviation Medicine	Pensacola, Fla		For information regarding program, write to Director Graduate Medical Training Bureau of Medicine and Surgery U S Navy, Washington 25 D C	2	
NONFEDERAL					
Ohio State University Medical Center	Columbus, Ohio	W F Ashe		3	3[illegible]

[1] Includes one year at a school of public health one year Advanced Course in Aviation Medicine, one year residency, and one year of supervised practice at selected sites

OCCUPATIONAL MEDICINE

The following educational institutions have been approved by the Council and the American Board of Preventive Medicine, through the Residency Review Committee for Preventive Medicine, for THREE years of training in Occupational Medicine The academic portion of these residencies will be given in the institutions listed The in plant training is being arranged, and a separate listing of such programs is published in this issue immediately following the list of institutions giving the academic portion

School	Location	Physician in charge
Harvard University School of Public Health	Boston	J I Whittenberger
University of Michigan Institute of Industrial Health	Ann Arbor Mich	S L Miller
University of Rochester School of Medicine and Dentistry	Rochester, N Y	J H Sterner
University of Cincinnati Institute of Industrial Health Graduate School of Arts and Sciences	Cincinnati	R A Kehoe
Ohio State University Medical Center, Department of Preventive Medicine	Columbus, Ohio	W F Ashe
University of Pittsburgh Graduate School of Public Health	Pittsburgh	A G Kammer

The following plants and agencies have been approved by the Council and the American Board of Preventive Medicine, through the Residency Review Committee for Preventive Medicine, for ONE year of training to cover the requirement for in-plant training in residencies in Occupational Medicine For further detailed information concerning a program, it is suggested that the applicant write to the physician in charge of the particular program concerned

Plant or Agency	Location	Physician in charge
E I Du Pont de Nemours and Co, Inc	Wilmington, Del	A J Fleming
Caterpillar Tractor Co	East Peoria, Ill	H A Vonachen
U S Army Environmental Health Center	Army Chemical Center Md	Commanding Officer
Ford Motor Co	Dearborn Mich	F A Irvin
General Motors Corporation	Detroit Mich	S D Steiner
New York State Department of Labor, Division of Industrial Hygiene	New York City	M Kleinfeld
Eastman Kodak Co	Rochester N Y	J H Sterner
National Lead Company of Ohio	Cincinnati Ohio	J A Quigley
Hq, Air Materiel Command	Wright Patterson Air Force Base, Ohio	W F Hall
Pennsylvania Dept of Health Div of Occupational Health	Harrisburg Pa	J Lieben
Westinghouse Bettis Atomic Power Division	Pittsburgh	R F Masters
General Electric Co Hanford Atomic Products Operation	Richland Wash	W D Norwood
Allis Chalmers Manufacturing Co	West Allis Wis	P J Whitaker

PUBLIC HEALTH

Residency programs in Public Health in the following states and cities have been approved for training by the Council and the American Board of Preventive Medicine, through the Residency Review Committee for Preventive Medicine

Department of Health	Location	Director	Local Areas	Population	Length of Approved Program (Years)	[illegible]
U S Army	6th Army Hdqts Fort Ord and Presidio of San Francisco, Calif	A Peczenik	Military Posts of Ford Ord Presidio of Monterey, Camp Roberts, Hunter Liggett Military Reservation Calif	112,000*	1(o)	
	1st Army Hdqts Fort Dix N J	G R Carpenter	Fort Dix Military Reservation	30,000	1(j)	
	Governor s Island, N Y	G R Carpenter	New England New Jersey & New York	100,000		

Numerical and other references are listed on pages 811 through 814

22 PREVENTIVE MEDICINE—Continued

Department of Health	Location	Director	Location Areas	Population	Length of Approved Program (Years)	Stipend
State of California	Berkeley	M H Merrill	Berkeley City	121 900*		550
			Contra Costa County	382 200*		
			Los Angeles City	2 447 600*		
			Orange County	670 000*		
			San Diego County	1 006 800*		
			San Francisco City and County	700 000*		
			Santa Clara County	418 900*		
State of Delaware	Dover	M H Mires	Kent and New Castle Counties (a)	240 000*	2	500(b)
State of Florida	Jacksonville	W T Sowder	Alachua Gainesville	80,500*	2	600
			Dade Miami	846 800*		
			Hillsborough Tampa	349 300*		
			Palm Beach West Palm Beach	214 300*		
			Pinellas St Petersburg	296 100*		
State of Georgia	Atlanta	F H Venable	Florida State Board of Health (h)	1 484 300*	2	685
State of Illinois	Springfield	I L Fatherree	Cook County (c) (d)	1 150 000*	2	576
			Peoria (City) and Peoria County (d) (e)	185 000*	1	
			Will County (d)	176 000*	1	
State of Maryland	Baltimore	F Davens	Anne Arundel County	200 000*	2	542
			Baltimore City	985 000*		
			Baltimore County	466 000*		
			Harford County	70 000		
			Montgomery County	310 000*		
			Prince Georges County	350 000*		
			Washington County	88 000*		
State of Michigan	Lansing	A E Heustis	Wayne County	2 843 890	2	400
			Michigan Dept of Health (m)			
State of Minnesota	Minneapolis	R N Barr Secy and Ex Off	Minneapolis City	521 900*	2	400
			Olmsted County including Rochester City	52 201*		
State of Mississippi	Jackson	T A Milne	Mississippi State Board of Health	333 000	2	512 50
New York City	New York City	R F Rothermel	(n)	8 010 000	2	443
State of New York	Albany	F B Amos	(l)		2	567
State of North Carolina	Raleigh	T W R Norton	Charlotte Mecklenburg County	275 000	2	
			Forsyth Winston Salem	181 500*		
			Halifax	61 000*		
			Orange Pearson Chatham Lee	1 [illegible] 000*		
			Pitt	65 000*		
State of Oklahoma	Oklahoma City	T W Shackleford	Pottawatomie Pontotoc Counties	50 000*	2	416
			Tulsa (City) and Tulsa County	300 000*		
State of Oregon	Portland	R H Wilcox	Multnomah County (s)	13 [illegible] 000*	2	700
			Clackamas County	113 100		
			Jackson County	71 300*		
			Lane County	150 300*		
State of Pennsylvania	Harrisburg	C C Kuehn	(t)	1 659 000*		
State of Tennessee	Nashville	R H Hutcheson	Memphis Shelby County			
			Chattanooga Hamilton County			
			Sullivan County			
State of Texas	Austin	T F Peavy	(k)	4 954 834	2	660(p)
State of Virginia	Richmond	M I Shanholtz	Arlington County (w)	160 828*	1	700
State of Washington	Seattle	B Bucove	Benton Franklin	92 700*	2	750
			Bremerton Kitsap	79 400*		
			Clark Skamania	88 400*		
			King Seattle	893 700*		
			Snohomish District	140 200		
			Spokane City	190 400*		
			Tacoma Pierce County	392 900*		

* Estimated

(a) Excludes the city of Wilmington

(b) To those planning to work in state

(c) Excludes Chicago Evanston Oak Park Stickney Township and Winnetka (including Glencoe Kenilworth Northfield and remainder of New Trier Township) all with full time health officers

(d) Assistance can be arranged for securing the MPH degree during or immediately after the first residency year Appointments can be effective the first of any month Appointments are limited to those training for service in Illinois Exceptions may be made in special cases U S citizenship and Illinois Medical License required

(e) Training is given under one director in both the City and County Health Departments

(f) Arrangements for remuneration made on an individual basis

(g) 43 city-county or county health departments and 6 city health departments in which training may be given depending upon local conditions and the needs and desires of the resident

(h) State of Georgia with emphasis on 6 major districts

(i) Assistance can be arranged for securing the MPH degree after successful completion of residency experience Appointments will be limited to those training for service in Oregon

(j) Combined one year program Fort Dix Health Center Fort Dix, N J and Headquarters First U S Army Preventive Medicine Division Governors Island New York City for second year of field training

(l) Training is given in any one of 9 city health departments 20 county health departments or 13 district offices within the state Fellowship granted for attendance at school of public health during and after first year of residency

(m) Training to be with Michigan Department of Health with field experience in local health departments

(n) Includes training at Montefiore Hospital

(o) Combined one year of training second year of field training Fort Ord and Presidio of San Francisco Calif

(p) Stipend offered only to those residents who plan to remain in public health work in the state at least six years Applicants must be eligible for licensure to practice in Texas applications not accepted from aliens

(r) Arrangements for remuneration made upon determination of field of interest and location desired

(s) City of Portland population (402 300) is not included in this 1958 Census estimate

(t) Assistance can be arranged for securing the MPH degree during or immediately after the first residency year

(u) Training in Fla State Board of Health Jacksonville with field experience in local health departments predominantly those approved for public health residencies

(v) Field experience in four county health departments

(w) Plus selected rural areas to supplement urban program

Numerical and other references are listed on pages 811 through 814

23 PROCTOLOGY

Residency programs in the following hospitals have been approved by the Council and the American Board of Proctology, through the *Residency Review Committee for Proctology*, as offering acceptable training in the specialty

Hospitals, 14, Residencies, 34

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Maintenance	
NONFEDERAL AND VETERANS ADMINISTRATION														
CALIFORNIA														
Los Angeles														
Queen of Angels	D A Gazzaniga	11	528	10	60	10	1	1	0	0 =	2	300-400	FM	*
White Memorial	M R Hill Sr	5	270	2	100	1 805	1	1	0	1 =	3	215-280	PM	*
LOUISIANA														
New Orleans														
Ochsner Foundation	M O Hines	11	386	1	100	7 678	1	1	0	0 =	2	300-	PM	*
MICHIGAN														
Grand Rapids														
Ferguson-Droste-Ferguson	F A Ferguson	59	2,081	28	57	11 088	2	2	0	0 =	4	275-375	0	*
MINNESOTA														
Minneapolis														
University of Minnesota Hospitals	W Bernstein					1,209						244 244		*
Rochester														
Mayo Foundation [22]	R J Jackman		788				2	2	0	0 =	4	200-200	PM	*
NEW YORK														
Buffalo														
Buffalo General	J S Knapp	16	494#	9	30	284	1	1	0	0 =	2	175-200	FP	*
Millard Fillmore	W H Bernhoft	7	223	6	33		1	1	0	0 =	2	298 323	PM	*
OHIO														
Youngstown														
Youngstown	H S Smith	23	615	18	33	101	1	1	0	0 =	2	275-350	FM	*
PENNSYLVANIA														
Allentown														
Allentown	G J Kratzer	24	905	8	38	36	1	0	0	0 =	1	225-250	FM	*
Philadelphia														
Temple University	H J Bacon	18	773	6	17	796	3	2	0	0 =	5	175 200	PM	*
Pittsburgh														
Health Center Hospitals of the University of Pittsburgh School of Medicine														*
Presbyterian	K Zimmerman	15	556	7	86		0	0	0	1 =	2	125-175	FM	*
TEXAS														
Dallas														
Baylor University	C Rosser	20	891	5	60	321	0	0	1	0 =	1	210-230	PM	*
WISCONSIN														
Milwaukee														
Milwaukee County	K J McCarty	9	170	4	50	11 337	1	1	1	1 =	4	229-434		*

24 PSYCHIATRY

Residency programs in the following hospitals have been approved for THREE years of training by the Council and the *American Board of Psychiatry and Neurology*, through the Residency Review Committee for Psychiatry and Neurology (Applicants intending to qualify for examination by the American Board of Psychiatry and Neurology, *Inc*, should refer to the Board requirements that the candidate have had at least two of the three years of his training in a program or programs approved at the two or three year level

Hospitals, 226, Residencies, 3,450

	Chief of Service or Program Director	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Maintenance
UNITED STATES ARMY														
CALIFORNIA														
Letterman General, San Francisco	*J Kiersch*	*136*	*101*	*1 145*	*1*	*100*	*9 875*	5	5	5	0 =	15		FM
DISTRICT OF COLUMBIA														
Walter Reed General, Washington	W H Anderson	138	195	1 209	3	100	27 860	6	6	6	0 =	18		
UNITED STATES NAVY														
CALIFORNIA														
U S Naval, Oakland	F H Ocko	10	235	1 626	1		5 422	3	2	2	0 =	7		
MARYLAND														
U S Naval, *Bethesda*	J G Hebble	*44*	*92*	*807*			*961*	3	3	6	0 =	12		
UNITED STATES PUBLIC HEALTH SERVICE														
KENTUCKY														
U S Public Health Service, Lexington	S N Kieffer	41	1,070	3 602	10	70		6	6	6	0 =	18	[illegible]	0
DEPARTMENT OF HEALTH, EDUCATION AND WELFARE														
DISTRICT OF COLUMBIA														
Freedmen's, Washington	E Y Williams	22	21	247	5	60	4,848	0	2	1	0 =	3	308-414	FP
St Elizabeths Washington	A H Kiracofe, Jr	24	7,512	4	1	45	3	8	8	8	0 =	24	400-467	0

Numerical and other references are listed on pages 811 through 814

24 PSYCHIATRY—Continued

	Chief of Service or Program Director	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	By Maintenance PM O
NONFEDERAL AND VETERANS ADMINISTRATION														
ALABAMA														
Birmingham														
University of Alabama Medical Center		1												
University Hospital and Hillman Clinic	J N Sussex		7[illegible]	1 979	3	33	5 000	4	2	2		= 8	200-2[illegible]0	FM
Veterans Admin	J J Jarvis		5[illegible]	508	5	20	36						271 347	O
ARKANSAS														
Little Rock														
Arkansas State	H B Molholm	2	4 9[illegible]1	2 9[illegible]4	404	21	1,144	4	0	2	0	= 6	647 7[illegible]0	PM
University of Arkansas Medical Center	W G Reese		14	79			2 615	3	3	2	0	= 8	170 32[illegible]	O
North Little Rock														
Veterans Admin	H B Witten	3	1 982	3 60[illegible]	90	74		8	8	8	0	= 24	271 347	O
CALIFORNIA														
Camarillo														
Camarillo State	F H Carrett	4	6,316	10 367	403	49	2 500	[illegible]	5	5	0	= 1[illegible]	436-782	O
Eldridge														
Sonoma State—Napa State		5												
Sonoma State	D W Wardell		3 [illegible]01	3 906	104	88	288	0	4	0	0	= 4	436	O
Napa State (Imola)	D Wilson		5 826	4 101	632	52	1 418	3	0	3	0	= 6	481 862	O
Long Beach														
Veterans Admin	M Feld	6	5[illegible]	328			1 6[illegible]6	1	1	1	0	= 3	271 462	O
Los Angeles														
Los Angeles County	J Stambrook		162	8 466	16	44	11 937	8	7	7	0	= 22	273-303	PM
Mount Sinai	F C Alexander	7	18	161				2	2	2	0	= 6	200-300	PM
University of California	N Q Brill		8	59			13 568	10	10	7	2	= 29	240-782	FPO
Veterans Admin	J J Ferguson	8	1 909	3 152	139	78	11 280	12	12	12	0	= 36	270 270	O
Norwalk														
Metropolitan State	R I Wyers	9	3 726	3,[illegible]88	262	30	5 489	6	6	6	2	= 20	644 782	O
Palo Alto														
Stanford Medical Center and Affiliated Hospitals														
Palo Alto-Stanford Hospital Center	I Conda			1			5 60[illegible]	11	11	11	0	= 33	2[illegible]0 32[illegible]	O
Veterans Admin														
Community Hospital of San Mateo County			[illegible]9	1 574	3	100	15[illegible]						300-400	FM
Patton														
Patton State	O I Cerieke	11	4 187	2 987	37[illegible]	37	1 646	4	2	2	2	= 10	436 481	PM
San Francisco														
Langley Porter Neuropsychiatric Institute	A Simon	1[illegible]	93	27[illegible]	1	100	17 0[illegible]3	10	10	10	10	= 40	200 999	O
Sepulveda														
Veterans Admin	D McCorquodale	13	744	1 397	30	77		6	6	6	0	= 18	270-347	O
Stockton														
Stockton State	R A Kimmich	14	3 91[illegible]	6 011	406	43	1 311	6	4	4	0	= 14	436-481	O
Talmadge														
Mendocino State	D Lieberman	1[illegible]	2 437	1 172	113	84		3	3	3	0	= 9	436 782	PM
COLORADO														
Denver														
University of Colorado Medical Center														
Colorado Psychopathic	H S Caskill		8[illegible]	8[illegible]	1		13 391	18	18	18	0	= 54†	216 300	O
Veterans Admin	J J Woodfin	16	83	562	4	50		2	2	1	0	= 5	271 347	O
CONNECTICUT														
Hartford														
Institute of Living	F J Fraceland		368	599	4	1	2 144	8	5	3	0	= 16	367 583	O
Middletown														
Connecticut State	H S Whiting	17	2 840	1 602	328	30	4 722	8	8	8	0	= 24†	455-607	FM
New Canaan														
Silver Hill Foundation	I S Du Bois W B Fortune	18	5[illegible]	387			402	2	0	0	0	= 2	600 999	O
New Haven														
Yale New Haven Medical Center		19												
Grace-New Haven Community	J Ludz		39	3[illegible]			6 818	0	11	7	0	= 18	7[illegible]-1[illegible]0	O
Veterans Admin (West Haven)	J W Higgins		161	424	2	100		12	12	1	0	= 2[illegible]	271-347	
Newtown														
Fairfield State	J F Oltman	137	2 871	1 715	427	131	3 147	8	8	8	0	= 24	455-540	PM
Norwich														
Norwich State	R H Kettle	20	2 879	4 418	310	37	5 694	9	8	8	0	= 2[illegible]	45[illegible]-56[illegible]	FM
DELAWARE														
Farnhurst														
Delaware State		21												
DISTRICT OF COLUMBIA														
Washington														
Georgetown University	R A Steinbach	23					7 5[illegible]0	8	6	6	2	= 22	200 300	FM
FLORIDA														
Gainesville														
University of Florida Teaching Hospital and Clinics	P F Regan		8	17				3	3	3	1	= 10	217-450	
Miami														
Jackson Memorial	J M Caldwell	2[illegible]	111	1 033	5	40	9 8[illegible]2	7	7	7	0	= 21	2[illegible]0-3[illegible]0	PM
GEORGIA														
Atlanta														
Emory University School of Medicine Affiliated Hospitals														
Emory University	B Holland							[illegible]	[illegible]	5	0	= 15†	43[illegible]	PM
Crady Memorial	B Holland						1 204							
Milledgeville State (Milledgeville)	J Craig		12 000	3 890	87[illegible]	15	200	4	4	2	0	= 10	466-600	

Numerical and other references are listed on pages 811 through 814

24 PSYCHIATRY—Continued

	Chief of Service or Program Director	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Main Program FM PM 0
GEORGIA—Continued														
Augusta														
Medical College of Georgia Hospitals														
Eugene Talmadge Memorial	J McCrank		18	289			1 546	3	1	2	0	= 6	200-416	0
University	H M Cleckley		24	822			3 127	1	1	0	0	= 2	200 300	0
Veterans Admin	C J Jump	26	1 209	3 448	4	100		1	0	1	0	= 2	242 824	0
HAWAII														
Honolulu														
Hawaiian Psychiatric Training Program		27												
Queen's	K Rusch		16	51	3	33	890	3	3	3	0	= 9	22-600	0
Hawaii State (Kaneohe)	W J T Cody		1,150	600	43	67		3	3	3	0	= 9	40-722	PM
ILLINOIS														
Chicago														
Illinois State Psychiatric Institute	I Masserman	28	27	68			378	15	15	15	0	= 45	330-600	PM
Chicago State			1,613	5,038	774	0		0	15	15	0	= 30	330-600	PM
Michael Reese	R R Grinker	29	75	816			8 293	5	0	0	0	= 15	200-300	PM
Mount Sinai	H Garner	30	30	450	5	20	3,821	1	1	1	0	= 3	225-275	PM
Northwestern University Medical Center	B Boshes	31					2,192							
Chicago Wesley Memorial	B Boshes		11	407				1	0	0	0	= 1	125 125	FM
Passavant Memorial														
Veterans Admin Research	P C Agnew		25	178	2	50		4	4	4	0	= 12	241-462	0
Veterans Admin (Downey)	V Paunez		2,304	183	67	87		8	4	6	0	= 18	240 800	0
Evanston (Evanston)														
Presbyterian-St Lukes	L J Corty	32	50	479	3		884	3	5	3	0	= 9	125-145	FM
Stritch School of Medicine														
Affiliated Hospitals [100]	T T Madden	33												
Loretto			39	699	1	100	3 110	5	4	3	0	= 9	200-	FM
Mercy			24	272			749	3	3	3	0	= 9	225-300	FM
University of Chicago Clinics	C K Aldrich	34	14	152			7,938	4	4	4	2	= 14	240 300	0
University of Illinois Research and Educational Hospitals	J L Corty	35	37	179			5 292	4	0	3	0	= 10	160-215	PM
Veterans Admin (West Side)	I Halperin	36	85	1,263	1	100	402	3		3	0	= 9	270-347	0
Hines														
Veterans Admin	I Jensen	37	116	445	10	60	218	5	5	4	0	= 14	271 317	0
INDIANA														
Indianapolis														
Indiana University Affiliated Hospitals														
Indiana University Medical Center	I L Nurnberger						3 077	13	13	13	0	= 39	400-600	0
Larue D Carter Memorial	D L Moore		215	435	3	100	485	12	12	12	0	= 36	400-650	PM
Marion County General	D Schuster		65	561	19	20	1 116	1	1	1	0	= 3	269-371	PM
Veterans Admin	J N Tausk		70	312	5	50	108					= 1	277-467	0
IOWA														
Cherokee														
Mental Health Institute	W C Brinegar	38	1,083	782	100	57	2 152	4	4	4	0	= 12	900-999	0
Independence														
Mental Health Institute	S M Korson		1 080	933	100	11	1 027	4	4	4	0	= 12	925-999	0
Iowa City														
Iowa State Psychopathic	P J Huston		52	380			3 752	7	7	7	3	= 24	300-767	0
KANSAS														
Kansas City														
University of Kansas Medical Center	D Graves		24	140	1	100	1 367	6	6	6	1	= 19	175-400	PM
Veterans Admin (Kansas City, Mo)	V R Mueller		66	169								= 2	271 271	0
Topeka														
C F Menninger Memorial	K A Menninger	39	113	177	2	100	29 224	0	2	6	0	= 8	325-350	0
Topeka State	P F Feldman		1,275	872	102	75	14 851	20	0	0	0	= 20	324 341	
Veterans Admin [75]	D W Hammersley	40	918	2,669	83	78		15	14	15	0	= 44	271 315	0
KENTUCKY														
Louisville														
University of Louisville Medical Center	S S Ackerly													
Central State (Lakeland)	W Fox		1 979	2,677	139	18	1 617	5	1	2	0	= 6	200-583	
Veterans Admin (Lexington)	See listing of this hospital in following section													
Louisville General	S S Ackerly		18	1 007	2	50	2,376	2	1	1	0	= 4	116-166	FM
Norton Memorial Infirmary	S S Ackerly		20	260	2	50		0	3	3	0	= 6	250-833	PM
Veterans Admin	V Guglia		59	411	1	25	667	1	0	0	0	= 1	270-347	0
LOUISIANA														
New Orleans														
Charity Hospital of Louisiana														
Louisiana State University Unit	C Watkins	42	52	605	5	10	4 699	5	4	3	0	= 12	125-175	FM
Tulane University Unit	R G Heath	139	50	552	4	50	4 699	4	4	4	0	= 12	125-175	FM
Veterans Admin	R J Stone		38	217	1	100		1	1	0	0	= 2	270-318	0
MARYLAND														
Baltimore														
Johns Hopkins	J C Whitehorn		69	239#	1		7 950	6	6	6	2	= 20†	250-500	PM
Seton Institute	J H Bartemeier	43	262	625	16	44	447	4	4	4	0	= 12	250-350	FP
University	E B Brody		56	491	1		10 432	9	6	5	2	= 22	275-403	PM
Catonsville														
Spring Grove State	I Fuerk		2,696	1 316	221	34	3 631	7	5	6	0	= 18	417 713	0
Perry Point														
Veterans Admin	W M Harris	45	1,424	2,285	57	81	14	3	3	2	0	= 8	250 521	0
Towson														
Sheppard and Enoch Pratt	H M Murdock		199	449	10	30		4	4	2	0	= 10	367 467	
MASSACHUSETTS														
Boston														
Massachusetts General		48												
General Hospital Division	F Lindemann						5,211	4	0	0	0	= 4	100-183	FM
McLean (Belmont)	A H Stanton, M J Kahne		230	543	17	64	6 052	5	9	3	0	= 17	200-583	PM

Numerical and other references are listed on pages 811 through 814

24 PSYCHIATRY—Continued

	Chief of Service or Program Director	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Maintenance FM PM O
MASSACHUSETTS Boston—Continued														
Massachusetts Memorial	B Bandler	49	12	210			2 780	6	4	6	3	= 21	300 300	O
Massachusetts Mental Health Center	I R Fwalt	50	132	867	1		28 291	24	18	8	0	= 50	290 290	
New England Center	I M Hope	51	2	56			701	2	2	2	0	= 6	237 262	O
Boston State	I M Mackenzie	47	2,845	1 900	342	41	6 153	16	8	4	0	= 28	262 285	PM
Peter Bent Brigham	H M Fox	52						0	0	0	2	= 2	333 333	O
Veterans Admin Hospitals of the Boston Area		46												
Veterans Admin (Bedford)	F B Wheeler		1 629	341	49	61		3	3	3	0	= 9	371 462	O
Veterans Admin (Jamaica Plain)	S Tartakoff		193	62	3	33		10	14	14	0	= 38		
Veterans Admin (Brockton)	A S Mason		936	1 759	41	63	1 885	6	0	0	0	= 6	271-824	O
Worcester														
Worcester State	D M Moriarty	53	2 467	992	204	33	580	17	12	10	0	= 39	262 765	FPO
MICHIGAN														
Ann Arbor														
University [208]	R W Waggoner	54	137	577	2	50	11 082	12	12	10	10	= 44	180 275	O
Detroit														
Henry Ford	I D Proctor	55	2	476	5	60	8 538	1	1	1	0	= 3	368 460	O
Lafayette Clinic	I S Gottlieb	56	110	385			12 590	12	12	12	4	= 40	540-610	O
Receiving	I Graves	57	122	5 609	38	51	3 207	2	0	0	0	= 2	325 400	PM
Eloise														
Wayne County General Hospital and Infirmary	I A Belisle	58	3 160	1 149	73	22	9 293	5	5	5	0	= 15	571-613	O
Northville														
Northville State	P N Brown		2 140	586	127	38	7 215	8	3	4	0	= 15	579-656	O
Pontiac														
Pontiac State	W H Obenauf	59	3 058	4 122	174	34	2 028	8	8	8	0	= 24	579-656	PM
Traverse City														
Traverse City State	M D Sommerness	60	2 955	768	271	29	1 107	6	6	6	0	= 18	580-967	O
Ypsilanti														
Ypsilanti State	O R Yoder		4 038	1,552	189	43	5 153	7	7	7	0	= 21	579 825	O
MINNESOTA														
Minneapolis														
University of Minnesota														
Affiliated Hospitals														
Minneapolis General	W W Jepson		41	1 003	7	57	4 574	3	0	1	0	= 4	235-235	FM
University	D W Hastings		54	906	2	100	4 154	6	3	3	0	= 12	244 244	
Veterans Admin	W Shinon	61	99	468	4	100	9 870	4	4	4	0	= 12	271 462	O
Rochester														
Mayo Foundation	H P Rome	62		873				6	6	6	0	= 18	200-200	PM
MISSISSIPPI														
Biloxi														
Veterans Admin—Gulfport Division	I B Lamm	63	870	996	25	81		4	4	2	0	= 10	542 875	O
Jackson														
University of Mississippi														
Medical Center [3]		64												
University	F I Moore		1	67#			388	4	4	4	0	= 12	200 999	O
Veterans Admin														
Mississippi State (Whitfield)	I I Head		4 184	7 895	204	37		6	0	0	0	= 6	500 750	FM
MISSOURI														
Kansas City														
Kansas City General	W I Robinson		62	612	4	50	3 739	4	4	4	0	= 12	220-265	PM
St Louis														
Barnes	F Gilden	65	86	1 195	6	50	3 101	14	14	12	2	= 42	350 175	FM
St Louis City (Malcolm Bliss Mental Health Center) [51]	C Ulett	66	174	1 376	4	67	5 670	6	6	3	1	= 16	234 314	PM
Homer G Phillips														
St Louis State	I H Kohler	67	1 225	464	113	47	4 148	8	8	5	3	= 24	350-450	FM
Veterans Admin	B A Cruvant	68	80	355	2	50		5	5	5	1	= 16	271 462	O
NEBRASKA														
Omaha														
Nebraska Psychiatric Institute														
University of Nebraska College of Medicine	C Wittson		81	420	1	100	4 315	10	10	10	4	= 34	300 425	O
Veterans Admin	E A Majka	69	74	595	4	75	31	2	2	2	0	= 6	270 347	O
NEW JERSEY														
Greystone Park														
New Jersey State	A Crandell	70	5 267	1 721	503	29	1 896	4	4	4	0	= 12	542-625	O
Hammonton														
New Jersey State Hospital at Ancora	H H Brunt Jr	71	2 149	1 835	469	42		4	4	4	0	= 12	542-625	PM
Lyons														
Veterans Admin	I S Freeman	72	1 967	485	77	70	2 230	3	3	3	0	= 9	271 825	O
Marlboro														
New Jersey State	J B Gordon	73	2 749	1 419	389	34	1 898	2	2	2	0	= 6	541-625	O
Princeton														
New Jersey Neuropsychiatric Institute	R F Bennett	74	883	1,506	34	68	688	4	4	3	0	= 11	542-62	O
Trenton														
New Jersey State	H S Magee	75	3 460	1 293	375	27	1 718	2	2	3	0	= 7†	542-625	
NEW YORK														
Albany														
Albany	W I Holt Jr	76	40	1 507#	11	55	4 839	3	3	2	0	= 8	195-275	FP
Veterans Admin	I A Gilmore	77	291	352	2	100	1 407	3	3	3	0	= 9	271 347	O
Buffalo														
Buffalo State	D Whitehead	80	3 469	1 289	629	17	5,308	6	0	0	0	= 6	488-488	
Edward J Meyer Memorial	S M Small		104	2 762	94	43	2 935	3	3	3	0	= 9	322-499	PM
Central Islip														
Central Islip State	F I O'Neill		9,942	12 035	1024	4	2 700	15	11	14	0	= 40	500-564	

Numerical and other references are listed on pages 811 through 814

24 PSYCHIATRY—Continued

	Chief of Service or Program Director	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Main Teaching FM PM O
NEW YORK—Continued														
Kings Park														
Kings Park State	C Buckman		8,217	1,551	199	32	1,965	6	3	3	0	= 12	50-64	0
Marcy														
Marcy State	N Bilodow		2,711	968	350	33	2,198	[illegible]	[illegible]	[illegible]	0	= 15	221-221	
Middletown														
Middletown State Homeopathic	H Pleasure		3,470	816	317	35	14,194	2	2	10	0	= 14	50-58	FM
Montrose														
Veterans Admin	G Rosenberg		1,692	606	73	77	149	2	1	2	0	= [illegible]	271-317	0
New York City														
Bellevue Hospital Center														
Div III—New York University College of Medicine	N Zitrin		700	18,500	424	57	16,112	22	20	16	0	= 58		
Bronx Municipal Hospital Center	M Rosenbaum		106	1,132	3	33	33,329	12	12	14	6	= 44	265	PM
Brooklyn State	N Beckenstein	78	4,862	1,763	642	3		11	3	6	0	= 20	487-544	
Columbia-Presbyterian Medical Center	I C Kolb	81												
New York State Psychiatric Institute			112	981	4	25	1,069	10	10	10	0	= 30	200-250	0
Presbyterian							5,350	10	10	10	0	= 30	250-250	PM
Creedmoor State (Queens Village)	H A La Burt		6,265	2,475	609	25	569					= 25	50-564	
Kings County Hospital Center	I C Kaufman		381	9,390	113	10	36,688	16	17	0	0	= 33	145-195	
Manhattan State		85	3,027	1,208	311	30	7,625	8	4	1	0	= 13	50-64	
Mount Sinai	M R Kaufman	83	17	138			7,360	8	8	13	[illegible]	= 34	100-100	FM
New York	O Dietzlin	84	86	300			10,698	4	5	4	2	= 15	189-393	PM
St Luke's	J M Cotton	85	21	419	1		2,985	1	1	0	0	= 2	125-150	FM
St Vincent's	H J Tompkins	86	84	665	6	33	3,185	6	5	5	0	= 16	200-300	FM
St Vincent's Hospital of Westchester County (Harrison)	R D Isenin		136	195	15		1,219	1	[illegible]	1	0	= [illegible]	200-250	
Veterans Admin (Bronx)	W Brown	87	165	1,456	8	50	28	[illegible]	7	[illegible]	0	= 17	270-324	0
Veterans Admin (Brooklyn)	M Paine	79	112	219	2	50		2	0	3	0	= 5	271-347	0
Veterans Admin (Manhattan)	M Wiederlight	88	154	1,600	15	54	97	3	9	10	0	= 22	271-345	0
Northport														
Veterans Admin	H Tanner	89	2,187	786	75	47	984	1	1	1	0	= 6	290-350	0
Orangeburg														
Rockland State	A M Stanley		7,536	1,864	51[illegible]	20	5,932	11	15	10	4	= 40	400-550	0
Poughkeepsie														
Hudson River State	R C Hunt		5,615	7,318	6[illegible]	6	2,019	[illegible]	[illegible]	[illegible]	0	= 15	50-64	0
Rochester														
Rochester State	C J Terrence	90	3,252	1,965	480	53	4,983	3	2	2	0	= 7	565-564	
Strong Memorial Rochester Municipal	I Romano	143	77	1,075#	[illegible]	60	12,138	9	9	8	4	= 30	166-291	0
Syracuse														
State University of New York Upstate Medical Center Hospitals	M Hollender		140	650	4	75	14	6	6	6	0	= 18	250-350	0
Syracuse Psychiatric	M Hollender		57	304				4	3	1	0	= 8	271-347	
Veterans Admin	J J Danchy													
Utica														
Utica State	M Lazar	91	2,457	773	297	34	1,710	4	6	4	0	= 14	50-63	PM
Valhalla														
Grasslands	J V Rockwell		15	1,137	10	50	1,180	2	[illegible]	4	0	= 9	275-378	FM
West Brentwood														
Pilgrim State	H S Barahal		13,974	5,445	1,219	30	2,643	10	9	6	0	= 25	50-564	FP
White Plains														
New York Hospital-Westchester Division	J H Wall		282	369	16	69	5,451	6	[illegible]	3	0	= 11	250-500	FI
NORTH CAROLINA														
Chapel Hill														
North Carolina Memorial	C C Ham	92	40	510	1		19,661	12	12	15	[illegible]	= 41	249-185	0
Durham														
Duke University Affiliated Hospitals		93												
Duke	J W Busse		[illegible]	596			4,217	5	5	5	4	= 28	300-350	0
Veterans Admin	R M Meiller		71	450#				4	2	2	2	= 10	270-467	0
OHIO														
Cincinnati														
Rollman Receiving Hospital and State Institute of Psychiatry	C O Ranker	95	90	610				5	8	5	0	= 21	415-575	0
University of Cincinnati College of Medicine Hospital Group		94												
Cincinnati General	M Levine		40	799	[illegible]	67	2,170	14	11	8	0	= 33	260-383	FM
Veterans Admin	M Levine		64	427	2	50							271-462	0
Cleveland														
Cleveland Clinic	A D Weatherhead		5	101			1,427	2	2	2	0	= 6	275-325	0
Cleveland Psychiatric Institute and Hospital	J N Hinko	96	511	1,291	11	86	2,548	8	8	8	0	= 24	416-542	0
University Hospitals of Cleveland	D D Bond		54	566			14,745	6	6	6	0	= 18	200-400	PM
Columbus														
Columbus State	J O Dillon	97	2,754	1,065	269	[illegible]	10,509	15	15	15	0	= 45		
Ohio State University Hospitals		98												
Columbus Psychiatric Institute and Hospital	K M Patterson		107	915	1	100	11,914	5	5	8	0	= 21	411-791	
Worthington														
Harding Sanitarium	H S Evans	99	91	652	11		2,584	2	2	1	0	= [illegible]	400	0
OKLAHOMA														
Norman														
Central State-Griffin Memorial	M Wettstein	100	1,150	1,209	10	20	2,500	4	4	4	0	= 12	440-590	0
Oklahoma City														
University of Oklahoma Medical Center	L J West		16	90			4,090	6	6	6	0	= 18	375-458	PM
University Hospitals			67	323	2	50	35							
Veterans Admin	J P Shirley													
OREGON														
Portland														
University of Oregon Medical School Hospitals and Clinics		101												
Salem														
Oregon State	H L Nelson	141	3,543	3,540	377	29	2,424	4	3	[illegible]	0	= 12	845-915	

Numerical and other references are listed on pages 811 through 814

24 PSYCHIATRY—Continued

	Chief of Service or Program Director	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths Number	Deaths Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month Min Max	Main Maintenance FM PM O
PENNSYLVANIA														
Coatesville														
Veterans Admin	M I Rosenblum	102	1 037	629	85	84		4	1	4	0	= 9	270-347	O
Norristown														
Norristown State	W P Camp	10	4 500	6 666	349	30	1 825	12	0	0	0	= 12	488 518	FM
Philadelphia														
Eastern Pennsylvania Psychiatric Institute	W A Phillips	104	90	154			12 030	5	5	5	0	= 15	515-596	
Hahnemann Medical College and Hospital	V B O Hammett	10	15	492	1	100	2 600	3	2	1	0	= 6	75-75	FM
Hospital of the University of Pennsylvania	K Appel	100		300			7 875	6	6	6	0	= 18	250 300	
Mercy Douglass	H H Morris		67	263			948	6	0	0	0	= 6	250-250	O
Jefferson Friends Hospitals														
Friend	J J Dehne		141	374	9	93	1 116	4	4	0	0	= 8	400-400	PM
Jefferson Medical College	R A Matthews		19	382			1 984	1	1	0	0	= 2	100 150	PM
Institute of the Pennsylvania Hospital	J H Smith		204	1 291	1	18	5 968	3	2	1	0	= 6	200-300	O
Philadelphia General	J Harris J Mock		246	1 125	29	41	12 198	4	4	4	0	= 12	429-572	FM
Philadelphia Psychiatric	M W Brody	107	100	1 174			4 272	8	8	7	2	= 25	233-350	FM
Philadelphia State	F J Sielke	108	654	1 057	485	5	2 992	15	15	10	0	= 40	586-648	O
Temple University	O S English	100		75			5 935	6	6	7	0	= 19	175-225	PM
Pittsburgh														
Western Psychiatric Institute and Clinic	H W Brosin		113	80	2	100	11 252	15	15	15	0	= 45	343 500	O
Warren														
Warren State	J Roop	110	2 014	3,899	340	34	2 714	12	10	8	0	= 30	588-688	FM
PUERTO RICO														
Bayamon														
Puerto Rico Institute of Psychiatry	R Fernandez Marina	111	1 8	170	6		223	3	0	0	0	= 3	400 500	PM
Rio Piedras														
Psychiatric Center for Training and Research	F A Rosello		1 400	692	46	9	20 000	6	6	6	0	= 18	250 500	PM
SOUTH CAROLINA														
Charleston														
Teaching Hospitals of the Medical College of South Carolina	J J Cleckley	130	21	791			900	2	2	2	0	= 6	138 168	FM
Medical College														
Roper														
TENNESSEE														
Memphis														
Gailor Memorial Psychiatric	J S Hill	142	49	390			3 500	4	3	3	0	= 10	310-550	PM
Nashville														
Vanderbilt University	W K Orr	11	13	131			1 560	3	3	3	0	= 9	100-125	FM
TEXAS														
Austin														
Austin State	S A Hoerster Jr		2 760	3 110	261	65	2 251	15	15	0	0	= 30	475-810	O
Dallas														
Parkland Memorial	R Stubblefield	11	9	31			4 116	6	6	3	0	= 15	367-432	PM
Timberlawn Sanitarium	R I Stubblefield		99	777	2		173	4	4	0	0	= 8	400-450	FP
Galveston														
University of Texas Medical Branch Hospital	I H Harris		214	2 027	10	60	4 298	10	10	10	0	= 30	160-160	FP
Houston														
Baylor University College of Medicine Affiliated Hospitals		114												
Jefferson Davis	W T Thomas		18	312	3		3 100	4	4	4	0	= 12	125-165	FM
Methodist	M C Betti		4	447	2	100		0	2	2	0	= 4	100 175	FM
Veterans Admin	V D Pokorny		10	2 312	18	100	40	6	6	6	0	= 18	270-347	PM
UTAH														
Salt Lake City														
University of Utah Affiliated Hospitals		11												
Salt Lake County General	C H H Brandt		20	4 3	2	100	11 824	5	5	5	0	= 15	350-475	O
Veterans Admin	J J Bennett		3 2	427	32	94		2	0	0	0	= 2	271 462	O
VIRGINIA														
Charlottesville														
University of Virginia Medical Center Hospital		116												
University of Virginia	J P Stevenson		5	470	1	100	3 582	7	1	1	0	= 9	50-50	FM
Richmond														
Medical College of Virginia Hospital Division	R A Sumerau	117	28	791	6	50	3 190	2	2	1	0	= 5	100 150	FM
Veteran Admin	A Davis	118	10	743	5	60	2 322	2	2	2	0	= 6	271 412	PM
WASHINGTON														
Seattle														
University of Washington Affiliated Hospital														
King County Hospital Unit No 1 (Harborview)	H S Ripley		20	2 065	9	78	1,997	0	1	0	0	= 1	200 200	FM
University	H S Ripley			425			669	10	10	10	2	= 32	180 350	PM
Veterans Admin	H S Ripley		7	397	1	100	12	4	4	2	0	= 10	271 347	
Sedro Woolley														
Northern State	J R Hughes	119	1 771	670	148	66		3	3	3	0	= 9	492 600	PM
WISCONSIN														
Madison														
University Hospital	R Roeder	120	41	797			9 344	12	12	12	4	= 40	250-	FM
Milwaukee														
Associate Training Program of Milwaukee Hospitals														
Milwaukee County Hospital for Mental Diseases	C W Landis		1 007	1,842	19	42	2 400	3	3	3	0	= 9	291 375	O
Veterans Admin (Wood)	M J Primakow		391	1 339	10	70	4 404		1	1	0	= 2	271 347	PM
Milwaukee Sanitarium Foundation (Wauwatosa)	F S Furrell		13	597	13	85	844	3	3	3	0	= 9	291 375	O

Numerical and other references are listed on pages 811 through 814

24 PSYCHIATRY—Continued

Residency programs in the following hospitals have been approved for TWO years of training by the Council and the American Board of Psychiatry and Neurology, through the Residency Review Committee for Psychiatry and Neurology (Applicants intending to qualify for examination by the American Board of Psychiatry and Neurology, Inc, should refer to the Board requirements that the candidate have had at least two of the three years of his training in a program or programs approved at the two or three year level

Hospitals, 34, Residencies, 305

	Chief of Service or Program Director	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Main Affiliation FM PM O
UNITED STATES NAVY														
PENNSYLVANIA														
U S Naval, Philadelphia	C S Mullin, Jr		260	1,573	1		1 001	3	1	0	0	= 4		
NONFEDERAL AND VETERANS ADMINISTRATION														
ALABAMA														
Tuskegee Veterans Administration	W F Lewis		1 254	877	13	69	977	1	1	1	0	= 3	271-347	0
CALIFORNIA														
Berkeley Herrick Memorial	W Sheehy		39	736	2	50	1 367	3	3	2	0	= 8	300-400	FM
San Francisco Mount Zion	C R Friedman	122		78#			12 131	2	4	4	2	= 12	150-	FM
San Jose Agnews State	I L Waters		4,000	8,677	469	23	1 015	2	2	1	0	= 5	436-481	0
DISTRICT OF COLUMBIA														
Washington District of Columbia General	M McIndoo	123	175	4,115	9		300	3	2	1	1	= 7	233-398	0
George Washington University	L Yochelson		25	742			2 344	0	1	1	0	= 2	232-960	PM
ILLINOIS														
Galesburg Galesburg State Research	T Tourlentes		1,700	450	60	37	1,224	0	4	4	0	= 8	400-500	FM
KENTUCKY														
Lexington Veterans Admin	F W Straus		1 122	1,806	48	46	35	2	2	0	0	= 4	270-317	0
MARYLAND														
Sykesville Springfield State	I I Hitchman	125	3,308	1 462	383	34	3,140	[illegible]	[illegible]	[illegible]	0	= 15	400-710	0
MASSACHUSETTS														
Boston Beth Israel	G J Bibring	126					6 209	[illegible]	[illegible]	0	0	= 10	167 250	0
Boston City	P Solomon	127	10	71			2,233	0	3	3	0	= 6	248-248	FM
Medfield Medfield State	D P Kenefick		1,409	524	138	37	1 446	[illegible]	4	3	0	= 12	327 [illegible]	
Waltham Metropolitan State	M Aschoff		1 700	1,150	192	46	780	1	1	0	0	= 2	300 330	0
NEBRASKA														
Omaha Creighton Memorial-St Joseph	C H Farrell		61	721	2		87							
NEW JERSEY														
Cedar Grove Essex County Overbrook	H A Davidson		3 192	1 546	593	32	4 123	[illegible]	[illegible]	[illegible]	0	= 15	460-572	0
NEW YORK														
Binghamton Binghamton State	U Schutzer	128	3 183	4,221	364	9	1 850	3	2	0	0	= 5	50-563	0
Canandaigua Veterans Admin	D Davis	129	1 609	366	62	86	19	3	3	0	0	= 6	237 [illegible]	0
Helmuth Gowanda State	I M Rossman	140	2 929	868	314	22	1 997	4	4	7	0	= 15	50-583	FM
New York City City Hospital at Elmhurst	L Bellak		18	293	1		251	[illegible]	[illegible]	[illegible]	0	= 15	145-195	
Gracie Square	J Cammer		100	1,087	5	20		2	3	3	0	= 8	253-300	0
Hillside (Glen Oaks)	L L Robbins		192	948				9	8	8	0	= 25	200-300	PM
Port Chester High Point	A Gralnick		40	134				0	2	2	0	= 4	330-500	FM0
Willard Willard State	K Keill		2 859	697	269	14	1 962	[illegible]	[illegible]	0	0	= 10	50-575	0
NORTH CAROLINA														
Raleigh Dorothea Dix	W A Sikes		2 442	3 306	229	41	593	4	4	0	0	= 8	834 915	0
PENNSYLVANIA														
Allentown Allentown State	H T Fiedler		1 784	374	107	56	1 030	6	6	4	0	= 16	461-680	0
Danville Danville State [illegible]	L R Angus		2 609	1,021	231	19	3 145	10	6	4	[illegible]	= 25	424-691	FM
Embreeville Embreeville State	E R Wright		674	1,462	105	15	194	[illegible]	4	3	0	= 12	461 84	FP
Harrisburg Harrisburg State	H C Eaton		2,618	631	196	11		6	6	0	0	= 12	425-50	FM
Mayview Mayview State	J S Solhaug		3 160	905	370	4	1,479	6	6	0	0	= 12	460-85	FM
RHODE ISLAND														
Howard State Hospital for Mental Diseases	J F Regan		3,395	1,726	440	25	944	7	6	0	0	= 13	438-435	0

Numerical [illegible] listed on pages 811 through 814

[illegible]erical and other references are li[illegible]

24 PSYCHIATRY—Continued

	Chief of Service or Program Director	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Main Maintenance PM FM PM O
VIRGINIA														
Petersburg														
Central State		131												
Williamsburg														
Eastern State	I B Funkhouser		2 24	1 378	268	22	1 900	12	0	0	0	= 12	700 764	O

Residency programs in the following hospitals have been approved for ONE year of training by the Council and the American Board of Psychiatry and Neurology through the Residency Review Committee for Psychiatry and Neurology (Applicants intending to qualify for examination by the American Board of Psychiatry and Neurology Inc should refer to the Board requirements that the candidate have had at least two of the three years of his training in a program or programs approved at the two or three year level

Hospitals, 45 Residencies 262

UNITED STATES PUBLIC HEALTH SERVICE														
MARYLAND														
National Institutes of Health—Clinical Center Bethesda	R Cohen		5	92			804	0	0	6	0	= 6		
NEW YORK														
U S Public Health Service New York City	E W Green	13	39	577			1 181	0	0	3	0	= 3		
NONFEDERAL AND VETERANS ADMINISTRATION														
CALIFORNIA														
Compton														
Compton Sanitarium	C C Burns		83	667	6	17	5 754	4	0	0	0	= 4	350-500	O
Pomona														
Pacific State	C Tarjan		2 941	356	38	83	5,703	0	0	5	0	= 5	415 745	O
San Francisco														
Kaiser Foundation [4]	B I Kuhn		1	29			4 116	0	0	2	0	= 2	365-415	FP
Presbyterian Medical Center	I P Kuhn		8	159			3 844	4	4	4	0	= 12	100-175	PM
St Francis Memorial	I A Hamilton		14	292	3		993	1	0	0	0	= 1	450-450	PM
St Mary s	M Khlentzo						7 023	1	0	0	0	= 1	200-	FP
COLORADO														
Pueblo														
Colorado State	J L Rosenbloom		5 930	1 850	642	68		10	10	6	6	= 32	275-445	FM
DISTRICT OF COLUMBIA														
Washington														
Children s	R S Lourie			4#			1 032	0	0	3	0	= 3	350-400	O
FLORIDA														
Jacksonville														
Duval Medical Center	S G Bedell		56	796	6	67	4 137	2	2	0	0	= 4	200-250	FM
ILLINOIS														
Chicago														
Cook County	V G Urse		159	7 936	25	4		4	0	0	0	= 4	250-250	FM
Winnetka														
North Shore	S Liebman		71	456	12	58	635	0	0	2	0	= 2	300-600	FP
INDIANA														
Logansport														
Logansport State	I F Caffrey		2 400	1,178	289	14		4	0	0	0	= 4	675 675	FP
MARYLAND														
Crownsville														
Crownsville State	U E Wenzel		2 138	3 441	154	34	2 871							
Rockville														
Chestnut Lodge	D M Bullard		77	86	1		3 298	0	0	4	0	= 4	300-500	O
MASSACHUSETTS														
Foxborough														
Foxborough State	J F Shea		1 141	1 833	163	36	2 217	3	3	2	0	= 8	528-791	FM
Stockbridge														
Austen Riggs Center [4]	R P Knight		39	98	1		3 453	0	0	5	2	= 7	575-633	O
Taunton														
Taunton State	W E Glass		1 815	971	296	27	1 455	6	0	0	0	= 6	122 156	O
Waverley														
Walter E Fernald State School	C E Benda		2 310	149	37	68	500	2	0	0	0	= 2	200-650	O
Westborough														
Westborough State	D V Capra		1 817	767	199	30	914	2	0	0	0	= 2	255-255	O
MICHIGAN														
Northville														
Hawthorn Center	R D Rabinovitch		62	127			4 888	2	2	2	2	= 8	579-967	O
MISSISSIPPI														
Whitfield														
Mississippi State	J J Head		4 181	7 894	204	37		6	0	0	0	= 6	500-750	FM
NEBRASKA														
Ingleside														
Hastings State	I C Nielsen		1 439	916	128	3		8	4	4	4	= 20	400-500	PM
NEW HAMPSHIRE														
Concord														
New Hampshire State	G D Niswander		2 381	1 089	311	18	3 521	2	2	2	0	= 6	308-308	PM
NEW JERSEY														
Belle Mead														
Carrier Clinic														
Paramus														
Bergen Pines County	L M Reuling		3	1,577	20	10	1,249	2	0	0	0	= 2	200-200	FM

Numerical and other references are listed on pages 811 through 814

24 PSYCHIATRY—Continued

	Chief of Service or Program Director	Program Identification	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961-1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min-Max	Psychiatric Residence
NEW YORK														
Hempstead														
Meadowbrook	R. R. Stern		32	1,820	39	54	3,122	1	0	0	0	= 1	210-270	FM
New York City														
Lenox Hill	K. Woodward	144					2,000	0	0	1	0	= 1	500	PM
New York University Medical Center University	S. B. Wortis	133	2	38			1,680	2	0	0	0	= 2	145-195	FM
Roosevelt	R. W. Laidlaw		16	189	2		2,374	2	1	1	0	= 4	158-275	PM
Ogdensburg														
St. Lawrence State	H. B. Snow		1,895	692	213	28	527	6	4	0	0	= 10	500-506	0
Rhinebeck														
Astor Home for Children	G. Mota		35	15				0	0	1	0	= 1†	400-500	FM
Thiells														
Letchworth Village	I. N. Wolfson		4,231	318	61	54	154	2	0	0	0	= 2	502-560	FM
Wingdale														
Harlem Valley State	J. P. O'Donnell	134	5,187	6,348	147	21	1,266	8	0	0	0	= 8	505-563	FM
OHIO														
Cincinnati														
Longview State	D. Goldman		3,200	925	308	31	3,385	8	0	0	0	= 8	575-600	0
Toledo														
St. Charles	H. J. Hartman	135	56	1,006	1	100		2	0	0	0	= 2	450-	PM
PENNSYLVANIA														
Philadelphia														
Albert Einstein Medical Center	P. Sloane						2,324	0	0	3	0	= 3	300-	FM
Pittsburgh														
St. Francis General Hospital and Rehabilitation Institute	R. W. Staley		278	5,080	73	42	2,135	4	0	0	0	= 4	240-305	FP
RHODE ISLAND														
Providence														
Butler Health Center	J. S. Bockoven		39	351	12	25	2,602	0	0	2	0	= 2	521-667	0
Charles V. Chapin	W. N. Hughes		58	1,128	13	38	799	3	0	0	0	= 3	479-479	FM
Riverside														
Emma Pendleton Bradley	M. W. Laufer		57	23			860	0	0	1	3	= 4	300-500	PM
VERMONT														
Brattleboro														
Brattleboro Retreat	R. A. Kenworthy III		634	1,097	62	8	868	3*	0	2	1	= 6	408-608	0
Waterbury														
Vermont State	R. A. Chittler		1,145	566	131	21	960	5	0	0	0	= 5	450-590	FM
WISCONSIN														
Madison														
Mendota State	G. B. Tybring		962	2,761	58	19	300	2	0	3	0	= 5	722-747	0

PSYCHIATRY PROGRAM IDENTIFICATION

1. Alabama State Hospital, Tuscaloosa, Ala.
2. Six months psychiatry and six months neurology at University of Arkansas Medical Center, Little Rock, Ark.
3. Six months OPD at University of Arkansas Medical Center, Little Rock, Ark.
4. Six months psychosomatic medicine at Mount Sinai Hospital, Los Angeles.
5. Twenty-four months at Napa State Hospital and twelve months at Sonoma State Hospital.
6. Six months OPD at Veterans Administration Mental Hygiene Clinic, Los Angeles. Six months child psychiatry at Long Beach Child Guidance Clinic. Three months female service at Metropolitan State Hospital, Norwalk, Calif.
7. Six months acute inpatient service at Los Angeles County General Hospital, Los Angeles.
8. OPD Mount Sinai Hospital, Los Angeles, Los Angeles Psychiatric Service, Los Angeles Harbor General Hospital, Veterans Administration Mental Hygiene Clinic, Los Angeles, Cedars of Lebanon Hospital, Los Angeles, Division of Child Psychiatry, UCLA Medical Center, Los Angeles, Child Guidance Clinic of Los Angeles, Reiss-Davis Clinic for Child Guidance, Los Angeles.
9. Six months psychosomatic medicine at Los Angeles County General Hospital, six months mental retardation at Pacific State Hospital, Pomona, Calif. Twelve months, elective, at UCLA Medical Center, Los Angeles. Twelve months part time at Pasadena Child Guidance Clinic, Pasadena.
10. Nine months OPD at Berkeley State Mental Hygiene Clinic, Berkeley, Calif., three months female service at Napa State Hospital, Imola, Calif.
11. OPD at Pasadena Child Guidance Clinic, Pasadena, Calif., psychosomatic medicine at Riverside County General Hospital, Riverside, Calif., Riverside Mental Hygiene Clinic, Riverside, Calif.
12. Three to twelve months at San Francisco General Hospital, six to twenty-four months at Child Guidance Clinic, San Francisco, OPD at Cowell Memorial Hospital, Berkeley, Calif., six to twelve months OPD and Child Psychiatry at Berkeley State Mental Hygiene Clinic, Berkeley, Calif.
13. Twelve months OPD at Mount Sinai Hospital, Los Angeles, twelve months child psychiatry at the University of California, Los Angeles, twelve months at Reiss-Davis Clinic for Child Guidance, Los Angeles, twelve months adult OPD at Los Angeles Psychiatric Service, and twelve months adult OPD at Los Angeles Harbor General Hospital.
14. Six months at Langley Porter Clinic, San Francisco, six months adult OPD at San Joaquin General Hospital, French Camp, Calif.
15. Twelve months at Langley Porter Clinic, San Francisco, six months at Children's Hospital, San Francisco, twelve months at Stanford Medical Center, Palo Alto, Calif., three months children's inpatient service at Napa State Hospital, Imola, Calif.
16. Six months child psychiatry and six months female service at Colorado Psychopathic Hospital, Denver, three months psychosomatic medicine at Colorado General Hospital, Denver.
17. Six months psychosomatic medicine at Grace-New Haven Community Hospital, New Haven, Conn., three months neurology at Veterans Administration Hospital, West Haven, Conn., six months adult and child OPD at Connecticut State Hospital, Middletown, Conn.
18. Twelve months at Columbia-Presbyterian Medical Center, New York City.
19. Twelve months at Yale Psychiatric Institute, New Haven, Conn.
20. Six months at Hartford Hospital, Hartford, Conn., six months child OPD at the Institute of Living, Hartford, Conn.
21. Three months at Governor Bacon Mental Health Clinic, Delaware City, Del.
22. Two months forensic service at St. Elizabeth's Hospital, Washington, D. C.
23. Twelve months at D. C. General Hospital, Washington, D. C., three months inpatient service at Mt. Alto Veterans Administration Hospital, Washington, D. C.
24. Two months psychosomatic medicine at George Washington University Hospital, Washington, D. C.
25. Three months at Dade County Child Guidance Clinic, Miami, Fla., three months at South Florida State Hospital, Hollywood, Fla.
26. Twelve months at Eugene Talmadge Memorial Hospital, Augusta, Ga.
27. Six months OPD at State of Hawaii, Division of Mental Health, Honolulu, Hawaii.
28. Six months at Institute for Juvenile Research, Chicago, twelve months at Galesburg State Hospital, Galesburg, Ill., six months at Elgin State Hospital, Elgin, Ill.
29. Three months inpatient service at Illinois State Psychiatric Institute, Chicago.

Numerical and other references are listed on pages 811 through 814

PSYCHIATRY PROGRAM IDENTIFICATION—Continued

30 Three to nine month inpatient service at Illinois State Psychiatric Institute Chicago three to six months service at Veterans Administration (West Side) Hospital Chicago
31 Six months at Children's Memorial Hospital Chicago
32 Three months at Institute for Juvenile Research Chicago
33 Six months neurology at Cook County Hospital Chicago twelve months at Illinois State Psychiatric Institute Chicago twelve month at Institute for Juvenile Research Chicago
34 Three months at Illinois State Psychiatric Institute Chicago
35 Three months at Institute for Juvenile Research Chicago
36 Six months at Institute for Juvenile Research Chicago three months female inpatient service at Chicago State Hospital
37 Six months at University of Illinois Neuropsychiatric Institute Chicago three months at Institute for Juvenile Research Chicago three months elective at Veterans Administration Hospital Downey Illinois four and one half months OPD at Veterans Administration (West Side) Hospital Chicago
38 Three months at State Psychopathic Hospital Iowa City two months neurology at University Hospital Iowa City part time psychosomatic medicine at Sioux Valley Memorial Hospital Cherokee Iowa
39 Six to twelve months at Topeka State Hospital six to twelve months at Veterans Administration Hospital Topeka twelve months OPD at Family Service & Guidance Center Topeka six month at Boys Industrial School Topeka six months at University of Kansas Student Health Service Lawrence Kans
40 Six to twelve months elective at C F Menninger Memorial Hospital Topeka six to twelve months elective at Topeka State Hospital Topeka twelve months elective at Family Service & Guidance Center Topeka six months elective OPD at the University of Kansas Student Health Service Lawrence Kans six months elective at Boys Industrial School Topeka
41 Third year assigned to an approved university psychiatric training program
42 Louisiana State University affiliated with South East Louisiana State Hospital Mandeville and Central Louisiana State Hospital Pineville
43 Six months adult and child OPD at University Hospital Baltimore
44 Three month child psychiatry at D C General Hospital Washington D C
45 Six months child OPD at University Hospital Baltimore or Johns Hopkins Hospital Baltimore
46 Six months OPD at Veterans Administration Mental Hygiene Clinic Boston six months OPD at Douglas A Thom Clinic for Children Boston James Jackson Putnam Children's Center Roxbury Mass or Massachusetts General Hospital Child Psychiatry Clinic Boston six months at Harvard University Health Service Boston
47 Twelve to twenty four months at Massachusetts Memorial Hospital Boston six months neurology at Massachusetts General Hospital Boston twelve months child psychiatry at Judge Baker Guidance Center Boston Douglas A Thom Clinic Boston or Boston Floating Hospital
48 Twelve months at Beth Israel Hospital Boston twelve months at Peter Bent Brigham Hospital Boston six months neurology at Veterans Administration Hospital Boston
49 Twelve months at Boston State Hospital Boston four months at Boston City Child Guidance Clinic or Douglas A Thom Clinic Boston
50 Six months elective psychosomatic medicine at Peter Bent Brigham Hospital Boston six months elective child psychiatry at Judge Baker Guidance Center four months elective chronic service at Metropolitan State Hospital Waltham Mass
51 Twelve months at Boston State Hospital Boston three to four months at Boston Floating Hospital Boston
52 Twelve months at Massachusetts Mental Health Center Boston
53 Six months at Worcester Youth Guidance Center Worcester Mass
54 Six months elective at Ypsilanti State Hospital Ypsilanti Mich six months elective penal problems at Southern Michigan Prison Psychiatric Hospital Ypsilanti Mich
55 Three months child psychiatry at Hawthorn Center Northville Mich
56 Three months neurology at Receiving Hospital Detroit three months at Pontiac State Hospital Pontiac Mich three months psychosomatic medicine at Detroit Memorial Hospital Detroit or at Harper Hospital Detroit
57 Three months neurology at Detroit Memorial Hospital Detroit three months at Ypsilanti State Hospital Ypsilanti Mich six months psychosomatic medicine and child OPD at McGregor Center Detroit four months penal problems at Detroit House of Correction Detroit six months OPD at Harper Adult Psychiatric Clinic Detroit
58 Six months OPD at Wayne County Clinic for Child Study Detroit
59 Three months child psychiatry at LaFayette Clinic Detroit three months neurology at Wayne State University Detroit
60 Three to six months neurology and child psychiatry at LaFayette Clinic Detroit
61 Six months female service and six month child psychiatry at University Hospital Minneapolis nine months OPD at Veterans Administration Mental Hygiene Clinic Minneapolis
62 Three months elective at Rochester State Hospital Rochester twelve months at Amherst Wilder Child Guidance Clinic St Paul Minn
63 Twelve months at Charity Hospital New Orleans
64 Twelve months elective at Veterans Administration Hospital (Gulfport Division) Biloxi Miss inpatient service at Veterans Administration Hospital Jackson three months child OPD at Mental Health Unit State Department of Health Jackson Miss
65 Affiliated with Malcolm Bliss Mental Health Clinic and Veterans Administration Hospital St Louis
66 Affiliated with Homer G Phillips Hospital St Louis six to twelve months at Community Child Guidance Clinic St Louis
67 Affiliated with St Louis City Hospital (Malcolm Bliss Mental Health Clinic) and St Mary's Group of Hospitals of St Louis University six to twelve months at St Louis Mental Health Clinic
68 Affiliated with Barnes Hospital St Louis and St Louis State Hospital William Greenleaf Eliot Division of Child Psychiatry Washington University School of Medicine St Louis OPD at Veterans Administration Mental Hygiene Clinic St Louis
69 Affiliated with Nebraska Psychiatric Institute Omaha
70 Three months child psychiatry at New Jersey Neuro Psychiatric Institute Skillman N J four and one half months psychosomatic medicine at Morristown Memorial Hospital Morristown N J
71 Eight months at Jefferson Medical College Hospital Philadelphia two months forensic problems at New Jersey State Hospital Trenton two months child psychiatry at New Jersey Neuro Psychiatric Institute Princeton N J
72 Three months female service at New Jersey State Hospital Greystone Park N J two months child psychiatry at New Jersey State Diagnostic Center Menlo Park N J
73 Three months child psychiatry at New Jersey Neuro Psychiatric Institute Princeton N J
74 Two months forensic problems at Trenton State Hospital one month mental deficiency at Vineland State School Vineland N J five months adult and child OPD at Union County Psychiatric Clinic Plainfield N J three months psychosomatic medicine and OPD neurology at Muhlenberg Hospital Plainfield N J
75 Four months psychosomatic medicine at Mercer Hospital Trenton four months basic and clinical neurology at Jefferson Medical College Hospital Philadelphia four months at the Child Guidance Center of Mercer County Trenton six months of child and adult OPD at Mental Health Center Trenton
76 Three months chronic service at Veterans Administration Hospital Albany N Y one month child psychiatry at Rockland State Hospital Orangeburg N Y Also affiliated with Albany Child Guidance Clinic Albany N Y Marcy State Hospital Marcy N Y and Hudson River State Hospital Poughkeepsie N Y
77 Two months basic and clinical neurology and family service at Albany Hospital Albany N Y (integrated for residency training) Also affiliated with Albany Child Guidance Center Albany N Y Marcy State Hospital Marcy N Y and Rockland State Hospital Orangeburg N Y
78 Six months psychosomatic medicine at Mount Sinai Hospital New York also affiliated with Brooklyn Juvenile Guidance Center and Coordinated Community Mental Health Clinics Brooklyn
79 Affiliated with Kings County Hospital Brooklyn
80 Affiliated with E J Meyer Memorial Hospital Buffalo
81 Three months at Manhattan State Hospital New York City three months at Rockland State Hospital Orangeburg N Y
82 Five months psychosomatic medicine and adult and child psychiatry at Mount Sinai Hospital New York City
83 Six to twelve months at Manhattan State Hospital or Brooklyn State Hospital ten months child psychiatry at Godmothers League New York City
84 During the first two years two thirds of the time is spent at the Veterans Administration Hospital Montrose N Y
85 Six months chronic service at Manhattan State Hospital New York City two and one half months basic and clinical neurology at Columbia University College of Physicians and Surgeons New York City
86 Six months elective at Astor Home for Children or Catholic Charities Guidance Institute New York City
87 Twelve months female and child psychiatry at New York State Psychiatric Institute New York City
88 Twelve months at Bellevue Medical Center New York City
89 Six months child psychiatry and OPD at Kings County Hospital Brooklyn six months family service at Veterans Administration Hospital Montrose N Y six months neurology and psychosomatic medicine at Veterans Administration Hospital Brooklyn
90 Four months at Strong Memorial Hospital Rochester
91 Four months acute service at Syracuse Psychiatric Hospital Syracuse N Y six months child psychiatry at Marcy State Hospital Marcy N Y two months epilepsy service at Craig Colony Sonyea N Y
92 Four months at Dorothea Dix Hospital Raleigh N C John Umstead Hospital Butner N C Cherry Hospital Goldsboro N C or Broughton Hospital Morganton N C two months mental deficiency at Murdock School Butner N C
93 Six months at Durham Child Guidance Clinic Durham N C
94 Three months each at Longview State Hospital and Jewish Hospital Cincinnati
95 Three months at Longview State Hospital six months at Dayton Children's Psychiatric Hospital psychosomatic medicine and child psychiatry at the University of Cincinnati College of Medicine Hospital Group
96 Psychosomatic medicine and basic and clinical neurology at Cleveland Metropolitan General Hospital Cleveland six months at Cleveland Guidance Center Cleveland or Dayton Children's Psychiatric Hospital Dayton
97 Three months psychosomatic medicine at White Cross Hospital Columbus three months at Columbus Receiving Hospital for Children Columbus three months OPD at the Children's Mental Health Center Columbus
98 Three to six months at Juvenile Diagnostic Center Columbus
99 Affiliated with University Hospital Columbus for neurology
100 Three months neurology at Veterans Administration Hospital Oklahoma City twelve months adult and child OPD at Community Guidance Center Oklahoma City
101 Four months chronic service at Oregon State Hospital Salem Oregon four month neurology at Veterans Administration Hospital Portland Oregon

Numerical and other references are listed on pages 811 through 814

PSYCHIATRY PROGRAM IDENTIFICATION—Continued

102 Four months psychosomatic medicine at Veterans Administration Hospital Philadelphia Also affiliated with Jefferson Medical College Hospital Eastern Pennsylvania Psychiatric Institute, Hahnemann Hospital and Temple University Hospital, Philadelphia
103 Six months psychosomatic medicine and six months neurology at Jefferson Medical College Hospital, Philadelphia twelve months child psychiatry at Eastern Pennsylvania Psychiatric Institute Philadelphia, twelve months adult and child OPD at Lankenau Child Guidance Clinic Overbrook or Haverford Mental Health Clinic Haverford or Montgomery Mental Health Clinic Norristown, or Bucks County Mental Health Clinic
104 Six months inpatient service at Temple University Hospital, Philadelphia twelve months OPD at Danville State Hospital Danville Pennsylvania
105 Twelve months inpatient service at Institute of Pennsylvania Hospital Philadelphia two months research in basic sciences at Eastern Pennsylvania Psychiatric Institute, Philadelphia
106 Three months at Child Study Center Philadelphia
107 Three months psychosomatic medicine at Temple Hospital, Philadelphia three months neurology at Jefferson Medical College Hospital Philadelphia
108 Three months child psychiatry at Eastern Pennsylvania Psychiatric Institute Philadelphia
109 Six months inpatient service at Eastern Pennsylvania Psychiatric Institute Philadelphia six months inpatient service at Carrier Clinic Belle Mead, New Jersey
110 Three months at Eastern Pennsylvania Psychiatric Institute Philadelphia
111 Three months forensic and penal problems at Superior Court Social Services San Juan, Puerto Rico
112 Affiliated with Central State Hospital Nashville Thayer Hospital Nashville and Nashville Mental Health Center
113 Dallas Child Guidance Clinic, Dallas, elective Terrell State Hospital, Terrell Texas elective
114 Eighteen months child psychiatry and adult OPD three months elective inpatient service at Houston State Psychiatric Institute Houston, three months elective inpatient and outpatient child psychiatry at Texas Children's Hospital Houston
115 Six months chronic service at Utah State Hospital, Provo Utah
116 Three to six months at Children's Service Center Charlottesville Virginia two months mental deficiency and epilepsy at Lynchburg Hospital and Training School, Lynchburg Virginia
117 Affiliated with Eastern State Hospital, Williamsburg Virginia
118 Twelve months psychosomatic medicine and OPD at Medical College of Virginia, Richmond Virginia
119 Twelve months at University of Washington Medical School Hospital and Clinics Seattle
120 Six months chronic service at Mendota State Hospital Madison three months child OPD at Dane County Guidance Center Madison three months child inpatient service at Wisconsin Diagnostic Center Madison
121 Twelve months child an adult OPD at John A Andrew Memorial Hospital Tuskegee Institute Alabama
122 Twelve months at San Francisco General Hospital (Univ Calif Service), San Francisco
123 Affiliated with Georgetown University Medical Center Washington D C
124 Affiliated with Illinois State Psychiatric Institute Chicago Institute for Juvenile Research Chicago Cook County Criminal Court Behavior Clinic, Chicago, and Community Mental Health Clinic Peoria, Illinois
125 Two months psychosomatic medicine, child psychiatry and OPD at University of Maryland Psychiatric Institute Baltimore
126 Affiliated with McLean Hospital, Belmont Massachusetts
127 Affiliated with Department of Psychiatry Harvard Medical School Boston
128 Six months adult and child OPD at Broome County Mental Health Clinic Binghamton New York
129 Twelve months at Strong Memorial Hospital Rochester New York
130 Six months chronic service at South Carolina State Hospital Columbia South Carolina
131 Six months adult and children's inpatient and OPD at Medical College of Virginia, Richmond
132 Affiliated with Staten Island Mental Health Clinic Staten Island New York
133 Integrated program with service at Bellevue Hospital Center and University Hospital, New York City
134 Three months mental deficiency at Wassaic State School Wassaic New York
135 Affiliated with Lucas County Mental Hygiene Clinic, Toledo Ohio
136 Six months part time at Langley Porter Neuropsychiatric Clinic San Francisco
137 Six months OPD and psychosomatic medicine at Grace New Haven Hospital, New Haven six months clinical and research at Yale University School of Medicine New Haven eight months part time child psychiatry at Mental Hygiene Clinic Bridgeport, three months part time child psychiatry at Stamford Hospital, Stamford three months part time child psychiatry at Greenwich Hospital, Greenwich
138 Six months at Children's Hospital, Washington, D C
139 Twelve months at Charity Hospital (Tulane Unit), New Orleans
140 Three months epilepsy at Craig Colony and Hospital Sonyea N Y
141 Four months psychosomatic medicine at University of Oregon Hospital, Salem
142 Six months acute psychosomatic medicine and OPD six months neurology at John Gaston Hospital six months child psychiatry at Memphis and Shelby County Mental Health Clinic twelve months at Adult Psychiatric Clinic three months at Alcoholic Rehabilitation Center three months cerebral palsy at Les Passe three months Western State Hospital Western State Tenn
143 Includes assignments in Rochester State Hospital the nursery school of the Child Study Center and the Rochester Child Guidance Center
144 Three months part time inpatient service at Kings County Hospital two months part time inpatient service at Bellevue Hospital

CHILD PSYCHIATRY

The following residency training programs in Child Psychiatry are approved for two years of training in the sub specialty of Child Psychiatry by the Council, the American Board of Psychiatry and Neurology and its Committee on Certification in Child Psychiatry through the Residency Review Committee for Psychiatry and Neurology (Institutions identified with an asterisk (*) hold dual approvals 1) for one year of training in Child Psychiatry offered as an affiliated year in a program in general psychiatry, 2) for two years of training in Child Psychiatry offered independently Applicants intending to qualify for examination by the American Board of Psychiatry and Neurology should refer to the information for applicant published by the American Board of Psychiatry and Neurology

Institution	Program Director	Inpatients Treated	Outpatient Visits	First Year Residencies Offered	Total Residencies Offered	Stipend (Months)
UNITED STATES ARMY						
CALIFORNIA						
Letterman General San Francisco	T A Kiersch	5	1 268	1	1	Dependent upon military rank
NONFEDERAL AND VETERANS ADMINISTRATION						
CALIFORNIA						
Los Angeles						
Mount Sinai	G I Mohr	47	1 397	2	3	200
Palo Alto						
Stanford Medical Center Child Psychiatry Clinic	H I Shirley	0	2 100	4	[illegible]	200
San Francisco						
Children's Hospital Child Guidance Clinic	M Kaplan	0	5,98[illegible]	0	[illegible]	200-[illegible]
Langley Porter Neuropsychiatric Institute	S J Szurek	20	1 62[illegible]	[illegible]	[illegible]	[illegible]
Mount Zion Psychiatric Clinic	J Sylvester	0	3,300	2	4	[illegible]
COLORADO						
Denver						
University of Colorado Medical Center	G I Blom	78	10 992	4	8	[illegible]
DISTRICT OF COLUMBIA						
Washington						
Children's Hospital	R S Lourie	38	2,449	[illegible]	6	200
Georgetown University Medical Center	E S Kessler	0	1,079	2	4	200

Numerical and other references are listed on pages 811 through 814

CHILD PSYCHIATRY—Continued

Institution	Program Director	Inpatients Treated	Outpatient Visits	First-Year Residencies Offered	Total Residencies Offered	Stipend (Month)
ILLINOIS						
Chicago						
Institute for Juvenile Research	R F Robertson	26	21 600	6	12	500
Michael Reese Hospital	T Spurlock	26	1 462	6	18	200
University of Chicago Child Psychiatry Clinic	J F Kenward	51	1 912	2	4	450 per month (3,600 per year tax exempt and 1,800 per year in place of maintenance)
INDIANA						
Indianapolis						
Indiana University Medical Center	J F Simmons	47	5 723	2	4	500
KANSAS						
Topeka						
Menninger Clinic	F C Hirschberg	29	2,986	2	4	708
LOUISIANA						
New Orleans						
Guidance Center of the Institute of Mental Hygiene	J F Chappuis	0	3 115	2	3	300-500
Tulane University School of Medicine	C Phillips	37	1 159	8 12	25-35	3 600 7 200 (per year)
MARYLAND						
Baltimore						
Johns Hopkins	T Freeberg	By arrangement at an affiliated state hospital for children	4 500	2	4	416
MASSACHUSETTS						
Boston						
Beth Israel	H Werner	10	2 074	3	8	300
Boston University-Boston City Hospital Child Guidance Center	F H Cummer Jr	2	2 815	0	7	300-1 000
Douglas A Thom Clinic for Children	F N Rexford	750	4 354	—	5	300 500
Massachusetts Mental Health Center	G Rochlin	18	3 780	3	6	315 25
Worcester						
Worcester Youth Guidance Center	J Weinreb	0	8 491	6	12	500
MICHIGAN						
Ann Arbor						
Children's Psychiatric Hospital University of Michigan Medical Center	S M Finch	50	4 165	5	10	475 (3rd year residents)
Detroit						
Lafayette Clinic	C B Simson	76	4 185	4	8	600
MINNESOTA						
Minneapolis						
University of Minnesota Medical School	R A Jensen	121	2 519	2	4	500
Saint Paul						
Amherst H Wilder Child Guidance Clinic*	H S Lippmann	519	10 438	2 (If no 2nd year residents are available at the time)	2 (at any one given time)	330
MISSOURI						
St. Louis						
William Greenleaf Eliot Division of Child Psychiatry Washington University School of Medicine	E J Anthony	45	7 540	7 (fellowships)	7 (fellowships)	500
NEW JERSEY						
Plainfield						
Union County Psychiatric Clinic	W F Gans	0	8 743	1	2	500
Trenton						
Child Guidance Center of Mercer County	C R Swift	0	4 724	2	4	542
NEW YORK						
Albany						
Albany Child Guidance Center	L M Sportsman	0	2 273	1	2	500-580
New York City						
Albert Einstein College of Medicine and Bronx Municipal Hospital Center	T B Cramer	90	7 065	3	6	300-500
Catholic Charities Guidance Institute	F W Brockbank	0	17 412	0	6	200
Mount Sinai	A Blau	150	2 500	5	10	300
New York State Psychiatric Institute and Presbyterian Hospital	W S Langford	31	3 097	2	3	563 84

Numerical and other references are listed on pages 811 through 814

CHILD PSYCHIATRY—Continued

Institution	Program Director	Inpatients Treated	Outpatient Visits	First-Year Residencies Offered	Total Residencies Offered	Stipend (Month)
NORTH CAROLINA						
Chapel Hill						
North Carolina Memorial Hospital	L Jessner	17	8 876	4	9	4 6 7 000 (per year)
Durham						
Durham Child Guidance Clinic Duke University Medical Center	J A Fowler	32	5 550	4	6	400 83
OHIO						
Cincinnati						
Central Clinic (Child Guidance Home)	O Krug	18	7 972	5 01 6	12	300 90
Cleveland						
Western Reserve University Medical School University Hospitals	W D Boaz	0	9 866	2	4	300 50
Dayton						
Dayton Children's Psychiatric Hospital and Child Guidance Center for Dayton and Montgomery County	J M Cunningham	42	7 512	2	4	542
OKLAHOMA						
Tulsa						
Children's Medical Center Child Guidance Clinic	P C Benton	153	7 294	2	3	666 67
PENNSYLVANIA						
Philadelphia						
Child Study Center of Philadelphia	H G Gianakon	0	5 146	3	6	416 600
Eastern Pennsylvania Psychiatric Institute	R C Prall	27	4 964	2	4	315 50 350 (bi weekly)
Philadelphia Child Guidance Clinic	M Sonis	100	8 485	6	10	Public Health stipend level—5,7
Pittsburgh						
Pittsburgh Child Guidance Center	W I Linzer	66	14,729	4	6	1 116 per year
Wilkes-Barre						
Children's Service Center of Wyoming Valley	J J Robinson	11	5 791	4	4	350 583 33
RHODE ISLAND						
Providence						
Providence Child Guidance Clinic	H Liso	0	2 699	0	4	300
Riverside						
Emma Pendleton Bradley Hospital	M W Laufer	73	561	2	4	400 00
TEXAS						
Dallas						
University of Texas Southwestern Medical School	R I Stubblefield	11	1 225	1	2	400
Houston						
Houston State Psychiatric Institute	J A Kraft	27	5 521	3	6	175 minimum
UTAH						
Salt Lake City						
University of Utah College of Medicine	J J Rafferty	15	4 779	2	4	330

25 PUBLIC HEALTH

The programs in Public Health which have been approved by the Council and American Board of Preventive Medicine through the Residency Review Committee for Preventive Medicine are listed under Preventive Medicine page 762

26 PULMONARY DISEASE

Residency programs in the following hospitals have been approved up to June 30, 1961 for ONE to TWO years of training by the Council and the Subspecialty Board for Pulmonary Disease of the American Board of Internal Medicine See special announcement, Page 817

Hospitals 109, Residencies, 332

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Main Maintenance
UNITED STATES ARMY													
COLORADO													
Fitzsimons General, Denver	C S Christianson	258	804	15	73	4 696	1	0	0	0 =	1		
UNITED STATES NAVY													
NEW YORK													
U S Naval New York City (St Albans)							1	0	0	0 =	1		
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE													
DISTRICT OF COLUMBIA													
Freedmen's, Washington	K A Harden	56	186	19	37	5 385	0	0	1	0 =	1	308 417	FM
NONFEDERAL AND VETERANS ADMINISTRATION													
ARIZONA													
Phoenix													
Maricopa County General	B L Snyder	97	162	36	11	7,072	1	0	0	0 =	1	573 573	PM
CALIFORNIA													
Duarte													
City of Hope Medical Center	H G Smith	68	93	8	50		1	0	0	0 =	1	400 400	0

Numerical and other references are listed on pages 811 through 814

26 PULMONARY DISEASE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include Transfers)	Deaths Number	Deaths Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month Min Max	Main Emphasis FM PM O
CALIFORNIA—Continued													
Los Angeles													
Hospital of the Good Samaritan	R H Smart	19	70	42	60	2 09[illegible]	1	0	0	0	= 1	22[illegible]-27[illegible]	FM
Los Angeles County	H Curson	106	1 [illegible]	18[illegible]	43	10 084	1	0	0	0	= 1	319-319	PM
Murphys													
Bret Harte Sanatorium	I M Barber	10[illegible]	30[illegible]	26	19	16 518	1	0	0	0	= 1	300	PM
San Jose													
Santa Clara County	R D Rowan	80	210	1[illegible]	77	11 431	0	0	1	0	= 1	83-677	PM
Springville													
Tulare Kings Counties	W A Winn	122	19[illegible]	22	77	2,3[illegible]	1	0	0	0	= 1	600-600	PM
COLORADO													
Denver													
National Jewish	S H Dreschler	220	78	30	30	1 182	4	4	3	0	= 11	300-300	PM
University of Colorado Medical Center													
Colorado General	R S Mitchell	11	120	[illegible]	80	1 061	0	0	1	0	= 1†		
Denver General			130±	8	30								
CONNECTICUT													
Newington													
Cedarcrest	R C Felton	231	380	4[illegible]	40	2 717	1	0	0	0	= 1	30-[illegible]0	O
Norwich													
Uncas on Thames	N I Cross	2[illegible]	316	161	35	698	2	2	0	0	= 4	161 278	FM
Shelton													
Laurel Heights	K S Howlett Jr	300	197	41	46	1 029	1	1	0	0	= 2	211-400	PM
DISTRICT OF COLUMBIA													
Washington													
District of Columbia General	R Donohue	130	127	60	4[illegible]		2	1	1	0	= 4	223 253	O
George Washington University	F F Feffer	1[illegible]	510	31	73	72[illegible]	1	1	0	0	= 2	210 23[illegible]	FM
FLORIDA													
Lantana													
Southeast Florida Tuberculosis	M Kornot	11	7	44	68		1	0	0	0	= 1	200-300	FM
Miami													
Jackson Memorial	M F Filipe		177	12	42	1 074	1	0	0	0	= 1		
Tampa													
Southwest Florida Tuberculosis	A C Lewis Jr	1[illegible]	87	6	63		1	0	0	0	= 1	200-300	FM
HAWAII													
Honolulu													
Leahi	H H Walker	3[illegible]	97	4	39	4 10[illegible]		0	0	0	= 21	3[illegible]0-[illegible]0	FM
ILLINOIS													
Chicago													
Chicago State Tuberculosis Sanatorium	M M Pyle	730	617	18		12 113	2	0	0	0	= 2	3 1[illegible]1	O
City of Chicago Municipal Tuberculosis Sanitarium	I H Berard	1 299	2 183	173	8	10 832	[illegible]	0	0	0	= 2	383-402	FM
Cook County—Oak Forest Tuberculosis	[illegible] W Holme	100	2 224	12[illegible]	29		0	1	0	0	= 1	140-140	FM
Michael Reese	D B Rodner	38	1 183	31	78	4 429	1	1	0	0	= 2	12[illegible]-1[illegible]0	FP
Mount Vernon													
Mount Vernon State Tuberculosis Sanitarium	H C Rockers	10[illegible]	362	21	19	1 138	2	0	0	0	= 2	47[illegible]-[illegible]00	O
Peoria													
Peoria Municipal Tuberculosis Sanitarium	D Moore	67	107	11	4[illegible]	9[illegible]3	1	0	0	0	= 1	2[illegible]0-300	FM
KANSAS													
Kansas City													
University of Kansas Medical Center	M FitzPatrick	[illegible]	[illegible]	13	61	68	1	1	1	0	= 3	17[illegible]-271	FM
Veterans Admin (Kansas City Mo)	C I Andrews	Inc	in Int	Med									
LOUISIANA													
New Orleans													
Charity Hospital of Louisiana Louisiana State University Unit	W R Muenhead F H Seabury	30	211	7	37	4 670	3	0	0	0	= 3	200-2[illegible]	FM
MAINE													
Fairfield													
Central Maine Sanatorium	W B Crow	[illegible]	163	18	8	1 280	1	0	0	0	= 1	7[illegible]-[illegible]0	FM
MARYLAND													
Baltimore													
Veterans Admin	E B Storey	[illegible]0	9[illegible]	4[illegible]	82	[illegible]	1	1	0	0	= 2	271-402	PM
Glen Dale													
Glen Dale	W I Washington Jr	[illegible]2	1 [illegible]	43	61		6	0	0	0	= 6	[illegible]	
MASSACHUSETTS													
Boston													
Boston Sanatorium	R H Wright	9[illegible]	97	[illegible]	19	9[illegible]0	1	2	1	0	= 4	32[illegible]-32[illegible]	FM
Cambridge													
Cambridge Sanatorium	R Kurzmann	[illegible]	78	18	3	2 830	2	0	0	0	= 2	200-[illegible]0	FM
Rutland Heights													
Veterans Admin	J H Cretz	173	[illegible]	87	49	21	0	1	0	0	= 1	2[illegible]3-462	O
Waltham													
Middlesex County Sanatorium	H M Layne	127	61	39	[illegible]	17 029	1	0	0	0	= 1	607-607	FM
Westfield													
Westfield State Sanatorium	J M Houser	9[illegible]	162	22	[illegible]	10 77[illegible]	0	0	[illegible]	1	= 4	27[illegible]-[illegible]27	PM
Worcester													
Worcester County Sanatorium	H J Forge	107	1[illegible]2	33	1[illegible]	4 182	[illegible]	0	0	0	= 3	[illegible]0-[illegible]0	FM
MICHIGAN													
Detroit													
Henry Ford	F O Coates Jr	[illegible]0	[illegible]	39	61	12,[illegible]8	0	0	1	0	= 1	[illegible]-[illegible]	PM
Herman Kiefer	F T Chapman	90	1 6[illegible]3	170	59	81,[illegible]30	9	[illegible]	1	0	= 12	[illegible]0-6[illegible]3	
Howell													
Michigan State Sanatorium	W I Tidler	233	203	33	48	11 2[illegible]3	2	0	0	0	= 2†	900-999	O
Northville													
Wm H Maybury Sanatorium	W L Howard	780	1 072	40	43		2	0	0	0	= 2	[illegible]0-[illegible]0	O

Numerical and other references are listed on pages 811 through 814

26 PULMONARY DISEASE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Meals FM PM O
MINNESOTA													
Minneapolis													
Veterans Admin	F M MacDonald	124	156			1 248	1	1	0	0	= 2	271 462	
Nopeming													
Nopeming Sanatorium	R W Backus	122	611	29	52	6 644	1	0	0	0	= 1	150-150	FM
Oak Terrace													
Glen Lake Sanatorium	V K Lunk	256	320	29	72	35 718	1	1	0	0	= 2	391 446	0
Rochester													
Mayo Foundation [72]		Inc in Int Med										200-	
MISSISSIPPI													
Sanatorium													
Mississippi State Sanatorium	C V Watkins	437	1,110	43	14	2 854	2	0	0	0	= 2	400	PM
MISSOURI													
Kansas City													
Veterans Administration See University of Kansas Medical Center Kansas City, Kansas													
Koch													
Robert Koch	B Friedman	415	601	78	37		5	8	0	0	= 13	360-360	
Mount Vernon													
Missouri State Sanatorium	J I Yates	477	1 150	101	49	6,048	2	2	0	0	= 4	333-	0
St Louis													
St Mary's Group of Hospitals of St Louis University													
NEW JERSEY													
East Orange													
Veterans Admin	M J Small	158	903	20	40	50	1	0	0	0	= 1	270-462	0
Glen Gardner													
New Jersey Sanatorium for Chest Diseases	J A Smith	216	367	36	36	4,825	5	0	0	0	= 5	657 999	0
Jersey City													
B S Pollak Hospital for Chest Diseases	S Cohen	292	971	159	33	38 695	9	0	0	0	= 9	167 250	FM
Paramus													
Bergen Pines County	R R Little	120	623	83	40	32,054	3	0	0	0	= 3	200 200	FM
Verona													
Essex County Sanatorium	I Ochoret	309	633	31	68	1,066	3	2	0	0	= 5	578	FM
NEW MEXICO													
Albuquerque													
Veterans Admin	V N Longfield	156	1,034	33	97	340	1	0	0	0	= 1		
NEW YORK													
Albany													
Albany	E C Maxon Jr	55	243#	12	83		2	0	0	0	= 2	195 275	FM
Buffalo													
Edward J Meyer Memorial	D R McKay	161	503	51	49	4,277	1	0	0	0	= 1	380 380	PM
Farmingdale													
Nassau County Tuberculosis	J G Carlton	247	492	26	72	11 773	4	0	0	0	= 4		FM
Kingston													
Ulster County Tuberculosis	H I Schwartz	44	132	15	47	5 309	2	0	0	0	= 2	209 415	FM
Lockport													
Mount View	L C Lyander	121	249	20	40	4,476	3	0	0	0	= 3	393-473	FP
Mount Morris													
Mount Morris Tuberculosis	I L Armstrong	148	326	27	59	1[illegible] 607	2	0	0	0	= 2	619 619	0
New York City													
Bellevue Hospital Center	J H McClement	256	1 914	123	43	28 857	13	3	1	0	= 17		
Div I—Columbia University	M H Williams Jr	385	1 087	101	51	8 459	7	2	1	0	= 10†	215	FM
Bronx Municipal Hospital Center	S Bassin	14	70	4	25	632	2	0	0	0	= 2	145 195	
City Hospital at Elmhurst	H A Lyons	467	1 036	121	35	4 442	3	3	0	0	= 6	145-195	
Kings County Hospital Center	R G Bloch	51	398	38	51	3 500	3	1	1	0	= 5	207 282	PM
Montefiore	P Hurwitz					1 691	1	0	0	0	= 1	145 195	
Morrisania City													
New York University-Metropolitan													
Medical Center	I G Epstein	224	474	59	25	18 218	7	0	0	0	= 7	145 195	FM
Metropolitan	E J McCarthy	280	447	40	33		3	1	0	0	= 4	250	FM
St Joseph's Hospital for Chest Diseases	F H Robitzek	679	1 164	104	70	243	18	0	0	0	= 18	115 195	
Sea View	H H Epstein	432	720	88	21	5,477	11	0	0	0	= 11	145-195	
Triboro	D Stone	119	1 278	112	55	40	1	0	0	1	= 2	270-412	0
Veterans Admin (Bronx)	H J Katz	110	279	14	3	312	1	0	0	0	= 1	347 412	0
Veterans Admin (Brooklyn)													
Oneonta													
Homer Folks Tuberculosis	F Beck	218	316	32	31	11 744	3	0	0	0	= 3	413 413	0
Perrysburg													
J N Adam Memorial	R Nauen	203	238	24	75	2,121	2	2	0	0	= 4	594 729	0
Ray Brook													
Ray Brook State Tuberculosis	F Monroe	278	356	28	50	6 660	2	0	0	0	= 2	620-650	FM
Rochester													
Monroe County-Iola Sanatorium	W G Swalbach	241	240	35	71	15 618	2	2	1	1	= 6	137-485	0
Schenectady													
Glenridge	J M Blake	104	461	44	27	7 485	3	0	0	0	= 3	300-300	FM
Sunmount													
Veterans Admin	F J Des Autels	217	650	22	91		2	0	0	0	= 2	296-462	0
Syracuse													
Veterans Admin	A D Renzetti	51	176				0	0	0	1	= 1	412-412	
Valhalla													
Grasslands	W G Childress	124	467	61	61	2 691	2	2	2	0	= 6	225 337	FM
NORTH CAROLINA													
Durham													
Duke	F Menefee	4	205	3	67							250-350	0
Oteen													
Veterans Admin	R E Moyer	582	1 459	171	61	1,742	0	0	6	0	= 6	270-462	0
OHIO													
Brecksville													
Veterans Admin	R A Hemphill	251	580	41	63		0	1	1	0	= 2	271 293	0
Cleveland													
Cleveland Metropolitan General	D G Gillespie	223	711	39	51	307	4	1	0	0	= 5	417 500	FM
Sunny Acres-Cuyahoga County Tuberculosis	H G Curtis	382	492	36	47	89 845	3	0	0	0	= 3	225 500	FM

Numerical and other references are listed on pages 811 through 814

26 PULMONARY DISEASE—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Main Tenance FM PM O
OHIO—Continued													
Columbus													
Ohio State University Hospitals													
Ohio Tuberculosis	R I Atwell		306	16	75		2	2	3	1 =	8	300-500	PM
University	J A Prior		Inc in Int Med				0	0	1	0 =	1	300 500	PM
OREGON													
Portland													
Veterans Admin	I F Morris	98	464	51	80	78	0	0	1	0 =	1	271 412	PM
PENNSYLVANIA													
Philadelphia													
Eagleville Sanatorium	I I Kirshner	181	227	23	43		3	0	0	0 =	3	300 400	FM
Hospital of the University of Pennsylvania	R Mayock					1 265	2	1	0	0 =	3		
Philadelphia General	R Cohen R Mayock	116	894	138	98	655	1	1	0	0 =	2	405-405	FM
South Mountain													
Samuel C Dixon State	W A Gette	812	1 659	93	19	1 518	4	0	0	0 =	4	375 375	FM
TENNESSEE													
Memphis													
Veterans Admin	S Phillips	958	1 166	34	74	750	1	0	0	0 =	1	412 412	PM
West Tennessee Tuberculosis	F P Bowerman	220	909	48	67	1 558	2	1	0	0 =	3	245 290	FM
Nashville													
Veterans Admin	R A Goodwin Jr	113	300	9	67		0	1	1	0 =	2	270 462	O
TEXAS													
Dallas													
Parkland Memorial	C Le Maistre	123	495	25	50	1 088	2	0	0	0 =	2	150-150	PM
Veterans Admin	D O Shields	187	837	32	88	180	1	1	0	0 =	2	271 271	PM
Houston													
Baylor University College of Medicine Affiliated Hospital													
Veterans Admin	I Chofnas	[illegible]	1 387	110	86	372	1	0	0	0 =	1	412 412	PM
VIRGINIA													
Charlottesville													
Blue Ridge Sanatorium	C G Pearson	283	454	35	43	675	1	0	0	0 =	1	[illegible]	FM
Richmond													
Medical College of Virginia Hospital Division	D L Brummer	151	190	17	29		0	1	0	0 =	1	125 125	FM
Veterans Admin	F A Wade	209	1 179	42	78	1 700	0	0	2	0 =	2	271 412	PM
WASHINGTON													
Seattle													
Firland Sanatorium	T F Sheehy Jr	576	802	56	64	1 682	3	0	0	0 =	3	300 300	FM
WISCONSIN													
Madison													
Veterans Admin	J K Curtis						1	0	0	0 =	1	246 462	FM
Milwaukee													
Muirdale Sanatorium	A V Cadden	307	2 029	24	32		0	1	1	0 =	2	268 318	O
Veteran Admin (Wood)	M W Garry	100	598	42	79	2 413	0	0	1	0 =	1	317 317	PM

27 RADIOLOGY

Residency programs in the following hospitals have been approved by the Council and the American Board of Radiology through the Residency Review Committee for Radiology These programs are approved for THREE years of training in all phases of Radiology All programs listed offer three years of training intramurally or on an integrated basis, or through affiliation with another approved institution Hospitals listed with the following symbol (#) are approved and offer training of three years intramurally in addition to participating in an integrated residency program

Hospitals 371 Residencies 1887

	Chief of Service or Program Director	No of X ray Examinations	No Radium Treatments	No Deep X ray Treatments	No Superficial X ray Treatments	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Main Tenance FM PM O
UNITED STATES AIR FORCE												
TEXAS												
U S Air Force San Antonio [56]	H N Sturtevant	108 901	24#	2 157	209	3	3	3	0 =	9		
UNITED STATES ARMY												
CALIFORNIA												
Letterman General San Francisco	F Y Leaver	5 741	43	3 656	263	2	2	2	0 =	6		FM
COLORADO												
Fitzsimons General Denver	P A Paden	53 020	23	2 268	123	2	2	2	0 =	6		
DISTRICT OF COLUMBIA												
Walter Reed General Washington	J A Isherwood	57 627	303	12 000	42	4	4	5	0 =	13		
HAWAII												
Tripler Army Honolulu	H C Harrell	59 277	4	1 527	539	1	1	0	0 =	2		
TEXAS												
Brooke General San Antonio	P Zanca	72 483	122	4 801	137	3	3	3	0 =	9		

Numerical and other references are listed on pages 811 through 814

27 RADIOLOGY—Continued

	Chief of Service or Program Director	No of X ray Examinations	No Radium Treatments	No Deep X ray Treatments	No Superficial X ray Treatments	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Maintenance PM 0
UNITED STATES NAVY												
CALIFORNIA												
U S Naval Oakland	J H Barber	70 [illegible]	12	2 806	1 402	2	1	0	0	= 3		
U S Naval San Diego	S I Williams	153 107	36	8 605	539	2	1	2	0	= 5		
MARYLAND												
U S Naval Bethesda	J R King	37 073	17	3 791	103	2	2	2	0	= 6		
MASSACHUSETTS												
U S Naval Chelsea	W A Wulfmann	61 672	2	696	63	1	1	1	0	= 3		
NEW YORK												
U S Naval New York City (St Albans)	C Gartenlaub	37 458	7	3 036	25	1	1	2	0	= 4		
PENNSYLVANIA												
U S Naval Philadelphia	N I Wood	69 725	23	2 051	108	1	2	2	0	= 5		
UNITED STATES PUBLIC HEALTH SERVICE												
LOUISIANA												
U S Public Health Service, New Orleans	D Mac Killop	25 441				1	1	1	0	= 3		
MARYLAND												
U S Public Health Service Baltimore	W M Sennott	16,667	36	2 060	198	1	1	2	0	= 4		
National Institutes of Health Clinical Center, Bethesda	J R Andrews J Hilbish	34 417	1	167	10	1	1	1	1	= 4		
NEW YORK												
U S Public Health Service New York City	G A Shipman	35,078			506	2	2	1	0	= 5		
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE												
DISTRICT OF COLUMBIA												
Freedmen's Washington	P W Davis	58 726	30	2 194	324	0	0	0	1	= 1	308-417	PM
NONFEDERAL AND VETERANS ADMINISTRATION												
ALABAMA												
Birmingham												
Birmingham Baptist	J W Underwood	18 600	75	7,324	125	1	1	1	0	= 3	300-400	PM
University of Alabama Medical Center	K J Roth	69 901	227	13 500	463	3	3	3	2	= 11	190-250	PM
University Hospital and Hillman Clinic	R J Roth	25 412		1 624	7	1	1	1	0	= 3	271 347	0
Veterans Administration												
ARKANSAS												
Little Rock												
University	M I Davis	34 328	51	4 740	437	3	3	3	0	= 9	180-237	0
CALIFORNIA												
Duarte												
City of Hope Medical Center	M Jacobs	8 489	88	5 260	723	1	1	1	0	= 3	400-400	0
Orange County General (Orange)	D J Lawson	16 431	27	1 474	84							
Long Beach												
Memorial Hospital of Long Beach	H J Prichard	19,067	79	4 930	665	1	1	1	0	= 3	350-425	PM
Veterans Administration	B H Feder	56 433	18	6 501	1 052	3	3	3	0	= 9	271-462	0
Los Angeles												
California	W Hiemstra	23 163	95	2 048		1	1	1	0	= 3	225 275	FP
Los Angeles Tumor Institute	D Zion	27 860	9	1,872	208	3	2	2	0	= 7	265 370	FM
Cedars of Lebanon	J D Camp	30 032	13	4,444	108	2	0	0	0	= 2	325-375	FM
Hospital of the Good Samaritan	G Jacobson	115 759	367	11 370	1 000	4	4	4	4	= 16	273-319	PM
Los Angeles County	J Goin	145 550	33	1 520		1	1	1	0	= 3	275-325	FM
Queen of Angels	A H Dowds	40 650	82	15 559	401	2	2	2	2	= 8	210-490	FPO
University of California	J G Davis	115 402	27	8 935	999	3	4	4	0	= 11	271 318	PM
Veterans Administration	W J Stilson	3 848	71	3 265	210	2	1	2	0	= 5	215-235	PM
White Memorial	H H Jensen	16 487	29	1 161		1	1	1	1	= 4	200 295	FM
Oakland												
Highland Alameda County	H Kaplan	6 080	56	10 400	300	4	4	1	0	= 9	250-325	0
Palo Alto												
Stanford Medical Center and Affiliated Hospitals	R C Ripple	17 409	62	10 372	2 184	1	0	1	0	= 2	245-375	PMO
Palo Alto Stanford Hospital Center	J J Whitehead	22 721	18	1 418	67	1	1	1	0	= 3	250 350	FM
Veterans Administration												
Sacramento												
Sutter Community Hospitals	G G King	11 807	38	2 105	72	1	1	0	0	= 2	250-300	FP
San Diego												
San Diego County General	H Nussbaum	60 193	44	2 249	123	1	0	0	0	= 1	315-415	FP
San Francisco												
Children's	J Levitin	15 321	2#	1 268		1	1	1	0	= 3	150-250	FM
Kaiser Foundation	J C Bennett	16 952	20	2 299	75	1	1	1	0	= 3	200-700	FI
Mount Zion	R S Stone	61 189	82	10 070	423	4	3	3	3	= 13	243 316	
St Mary's	A J Williams	59 693	20	1 516	40	2	3	1	0	= 6	220-250	0
University of California Hospitals San Francisco General												
San Jose												
Santa Clara County	J J McCort	18 728	30	1 655	93	1	2	1	0	= 4	270 370	PM
Stockton												
San Joaquin General	A Cove	59 414	12	1 338		1	0	0	0	= 1	275-310	PM
Torrance												
Harbor General	J H Woodruff	34,737	83#	3 382	247	2	2	2	0	= 6	273-303	FM
COLORADO												
Colorado Springs												
Penrose	J W McMullen, J A Del Regato	21 231	2#	13 791	2 370	2	2	2	0	= 6	200-300	FM

Numerical and other references are listed on pages 811 through 814

27 RADIOLOGY—Continued

	Chief of Service or Program Director	No of X ray Examinations	No Radium Treatments	No Deep X ray Treatments	No Superficial X ray Treatments	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Maintenance FM PM O
COLORADO—Continued												
Denver												
General Rose Memorial	M Levine J Weiss	12 927	17#	1 204		1	1	1	1	= 4	205-310	FM
Presbyterian	K D A Allen	19 333	82	7 841	52	1	1	1	1	= 4	275-300	PM
St Joseph s	F B McClone	16 294	6	1,392		1	1	1	0	= 3	200-250	
St Luke s	W P Stampfli	19 464	29	3 742	205	1	1	1	0	= 3	225-250	PM
University of Colorado Medical Center												
Colorado General	D M Gould	28 658	109	2 028	343	3	1	6	0	= 10†	180-205	O
Denver General	I Salzman	30 767	28#	845	60						179-205	
Veterans Administration [114]	V I Dawitt	34 598	4	2 578	67	2	3	2	0	= 7	271 347	O
CONNECTICUT												
Bridgeport												
Bridgeport	J Espositto	21 257	51	3 036		1	1	0	0	= 2	240-265	PM
St Vincent s	R Russo	24 045	33	1 633	6	1	1	1	0	= 3	300 350	PM
Hartford												
Hartford	R J Ogden	45 646	70	14 136		2	1	1	0	= 4	125-257	FP
New Haven												
Yale New Haven Medical Center												
Grace New Haven Community	M M Kligerman	35 963	174	14 464	575	4	5	3	0	= 12	90-125	FM
Veterans Administration (West Haven)											271 347	
Hospital St Raphael	R Shapiro	23 973	9 929	5 193	439	2	2	2	0	= 6	300 335	PM
Waterbury												
St Mary s	K R Kness	21 662	19	2 340	71	1	1	1	0	= 3	225-275	FP
Waterbury	J M James	22 669	31	1 462	99	1	0	0	0	= 1	225-275	FM
DELAWARE												
Wilmington												
Delaware	W W Lattomus	36 895	213#	2 932	158	2	1	1	0	= 4	220 280	FP
DISTRICT OF COLUMBIA												
Washington												
District of Columbia General	B Gondos	81 230	42	2 783	95	3	1	0	0	= 4	233 258	O
Doctors	F O Coe	24,892	87	7 864	865	1	1	1	1	= 4	330-330	O
Georgetown University	W F Baensch	29 661	40	3 686	180	3	3	4	0	= 10	210-245	PM
George Washington University [130]	W W Stanbro	26 483	5	6 712		2	2	1	0	= 5	210 285	PM
Veterans Administration [136]	S R Bersack	14 976		1 497	35	2	0	1	0	= 3	271 347	O
Washington Hospital Center	F V Schumacher	47 892	30	8 673	690	2	2	2	0	= 6	215-245	FP
FLORIDA												
Gainesville												
University of Florida Teaching Hospital and Clinic	J D Reeves	5 575				2	2	2	1	= 7	217 450	
Miami												
Jackson Memorial	K F Parks	29 763	134	5 049	365	4	3	3	0	= 10	200-275	PM
GEORGIA												
Atlanta												
Crawford W Long Memorial	R A Elmer	23 315	48	4 023	188	1	1	1	0	= 3	285-300	O
Emory University	H S Weens	23 796	82#	4 207	2 564	2	2	2	0	= 8†	235 265	PM
Grady Memorial	H S Weens	54 491	62	7 001	234	3	3	3	0	= 9	100 200	FM
Piedmont	F G Smith	13 878	7	1 162	65	1	1	1	0	= 3	290 320	PM
Veterans Administration [14]	S Krantz	15 875	2	2 599	467	1	1	1	0	= 3	271 347	PM
Augusta												
Medical College of Georgia Hospital												
Eugene Talmadge Memorial	R Wigh	20 317	51	3 340	43	2	2	2	0	= 6	250-416	
University	S W Brown	21 684	26	969	218	1	1	1	0	= 3	300-250	O
Veterans Administration [149]	S M Roberts	18 340	1	1 184	85	0	1	0	0	= 1	270 347	O
HAWAII												
Honolulu												
Queen s	I I Buzaid	10 135	32	2 031	200	1	1	1	0	= 3	225 275	FM
ILLINOIS												
Chicago												
Augustana	D S Bellin	16 336		893	4	2	0	0	0	= 2	200 300	FM
Columbus	F D Lake D J Lochman	24 951	58	4 037	401	2	2	2	0	= 6	275-325	FM
Cook County	I F Hummon	129 997	118	14 009	1 278	8	4	8	0	= 20	200-200	FM
Illinois Central	R R Lough R C Crain	21 338	13	2 630	224	1	1	1	0	= 3	305-325	FM
Illinois Masonic	J H Gilmore	33 300	16	2 174	70	2	0	0	0	= 2	175-235	FM
Mercy	C B Cahill	21 749	178	6 522	1 314	1	1	1	0	= 3	225-300	FM
Michael Reese	B Levin F Uhlmann	46 762	1 171	10 875	97		2	2	0	= 9	125-175	FP
Mount Sinai	J Nadelhaft F Japha	29 473	22	7 874	758	2	2	2	1	= 7	225-300	PM
Northwestern University Medical Center												
Chicago Wesley Memorial	A Cannon	45,365	22	5 188	132	2	1	1	0	= 4	125-175	FM
Children s Memorial	H White	32 916		724								
Passavant Memorial	R B Lewis	22 212	29	5 756	147	1	1	1	0	= 3	225-275	PM
Veterans Administration Research	F G Warnick W T Moss	23 774		6 200	191	3	0	0	0	= 3	271-462	O
Evanston (Evanston)	H C Burkhead	35 885	19	4 655	475	2	1	1	0	= 4	225-275	PM
Presbyterian St Luke s	F Squire	71 964	48	5 969	643	3	3	3	0	= 9	122 175	FM
University of Chicago Clinics	R D Moseley Jr	46 213	84	561	16 093	4	4	4	0	= 12	250-300	O
University of Illinois Research and Educational Hospitals	R A Harvey	60 542	83	7 887	905	3	2	2	0	= 7	160-215	PM
Veterans Administration (West Side) [161]	S A Leader	21 048	3	1 920	30	2	1	1	0	= 4	270-347	O
Evanston												
Evanston Hospital—See Northwestern University Medical Center Chicago												
St Francis	A C Ledoux	32 298	25	2 070	230	1	1	1	0	= 3	260-280	FM
Evergreen Park												
Little Company of Mary	J M Brosnan	47 002	42	2 041	300	1	0	0	0	= 1	225-275	FM
Hines												
Veterans Administration	F Hussey	67 457	57	10 457	250	3	7	3	0	= 13	271 347	O
Peoria												
St Francis	P R Dirkse	27 663	14	3 635	413	1	1	1	0	= 3	225-275	FM
Rockford												
Rockford Memorial	B Rosebery	21 705	4 140		1 121	1	1	1	0	= 3	225-225	FM

Numerical and other references are listed on pages 811 through 814

27 RADIOLOGY—Continued

	Chief of Service or Program Director	No. of X-ray Examinations	No. Radium Treatments	No. Deep X-ray Treatments	No. Superficial X-ray Treatments	Residencies Offered 1961-1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min-Max	Main Teaching: FM, PM, O
ILLINOIS—Continued												
Urbana												
Carle Memorial [illegible]	C. Gianturco	26,293	12	2,445	283	1	0	0	0 =	1	250-	O
INDIANA												
Bluffton												
Clinic	R. I. Bishop	21,785	8	1,260	56	1	1	1	0 =	3	300-400	PM
Indianapolis												
Indiana University Medical Center												
Affiliated Hospitals												
Indiana University Medical Center	J. V. Campbell	32,646	153	6,530	735	6	6	6	0 =	18	225-250	PM
Marion County General	W. Tosick	49,606	35	2,240	88	1	1	1	0 =	3	269-321	PM
Veterans Administration	J. V. Campbell	25,068	12	1,776	103				=	3	271-462	O
Methodist	H. C. Oehsner	43,176	186	1,686	480	1	1	1	0 =	3	248-336	O
IOWA												
Des Moines												
Iowa Methodist [illegible]	A. B. Phillips	17,997	19	1,591		1	1	0	0 =	2	200-250	FM
Veterans Administration	P. J. Tyler	26,141	1	1,250	32	1	1	1	0 =	3	271-412	PM
Iowa City												
State University of Iowa Hospitals	J. I. Van Epps	68,158	154	17,747		3	3	3	0 =	9	200-250	FM
Veterans Administration	J. G. Paton	20,641	2	2,381	91	1	1	2	0 =	4	270-462	PM
KANSAS												
Kansas City												
University of Kansas Medical Center	G. Tice	19,471	61	2,591	426	1	1	2	0 =	4	125-175	PM
Veterans Administration (Kansas City, Mo.)	M. F. Westfall	31,542	1	1,146	75				=	2	271-271	O
Wichita												
St. Francis	J. R. Kline	22,405	63	3,951	261	1	1	1	0 =	3	275-325	FP
KENTUCKY												
Louisville												
St. Joseph Infirmary	S. Johnson	26,294	105	6,500	2,600	1	1	2	0 =	4	290-245	PM
University of Louisville Medical Center												
Louisville General	J. J. Pirkey	18,457	24	7,402	397	3	3	3	0 =	9	116-212	FM
Veterans Administration	R. H. Akers	21,628	3	588	129	1	1	1	1 =	4	270-317	O
LOUISIANA												
New Orleans												
Charity Hospital of Louisiana	M. Garcia C. M. Nice	153,550	322	44,084	1,350	6	5	4	0 =	15	125-175	FM
Hotel Dieu—Sisters	H. Duhe	24,337	51	3,188	524	1	1	1	0 =	3	225-400	FP
Ochsner Foundation [illegible]	J. H. Little	61,655	112	3,282	226	1	1	1	0 =	3	225-275	PM
Southern Baptist	L. J. Bristow, Jr.	31,865		5,120	482	1	1	1	0 =	3	225-275	PM
Touro Infirmary	A. Payzant	37,096	22	2,644		1	1	1	0 =	3	125-175	FP
Shreveport												
Confederate Memorial Medical Center	P. Riley	37,012	68	8,727	230	2	2	2	0 =	6	125-300	FM
MAINE												
Bangor												
Eastern Maine General	H. A. Smith	23,873	53	2,383	59	1	1	1	0 =	3	125-250	FM
Portland												
Maine Medical Center	J. F. Gibbons	26,605	83	2,875	179	2	0	0	0 =	2	175-175	FP
MARYLAND												
Baltimore												
Baltimore City Hospitals	J. De Carlo, Jr.	30,174	8	594	117	1	2	1	0 =	4	150-250	FP
Johns Hopkins	R. H. Morgan	7,168	259#	17,170	17,170	4	4	4	3 =	15	160-185	PM
Sinai [illegible]	J. O. Salik	26,675	21	524		3	1	1	0 =	5	150-375	FM
University	J. M. Dennis	71,550	147	10,759		3	3	4	0 =	10	250-333	PM
Hagerstown												
Washington County	S. H. Macht	19,031	27	2,010	268	0	1	0	0 =	1	350-500	FM
MASSACHUSETTS												
Boston												
Beth Israel	J. G. Fleischner	23,660	7	837	13	3	1	1	0 =	5	167-250	O
Boston City	M. Ritvo	119,125	42	1,382	320	4	3	4	0 =	13	178-248	FM
Lahey Clinic [illegible]	M. I. Smedal	53,209	22	9,696	23	1	1	1	0 =	3	200-250	O
Massachusetts General	L. I. Robbins	98,023	90	11,726	3,141	4	4	4	0 =	12	108-185	FM
Massachusetts Memorial	G. Levene	19,000		2,703	100	1	1	2	0 =	4	175-275	O
New England Center	A. Ettinger	27,262	10	1,033	27	1	1	1	0 =	3	237-287	O
New England Deaconess	J. Marks	24,021	50	3,427	50	1	1	1	0 =	3	200-270	PM
Peter Bent Brigham [illegible]	J. B. Dealy, Jr.	31,919	24	2,906	95	4	4	4	0 =	12	42-167	FM
Children's Hospital Medical Center	J. B. D. Neuhauser	30,412		3,546		0	2	1	1 =	4	83-83	FM
Veterans Administration	L. Wissing	37,584		3,000	90	3	2	1	0 =	6		
Mount Auburn Faulkner Shattuck												
Associated Hospitals	R. Schatzki	22,662	4	2,220	33	1	1	1	0 =	3	125-225	FM
Mount Auburn (Cambridge)	J. E. Hawes	12,585		362	3	1	0	0	0 =	1	200-225	FM
Faulkner	H. B. Sear	10,575	11	6,769	43	2	0	0	0 =	2	262-267	PM
Lemuel Shattuck												
MICHIGAN												
Ann Arbor												
St. Joseph Mercy	S. W. Donaldson	31,760	8	2,978	242	1	1	1	0 =	3	310-385	FM
University	L. J. Hodges	75,831	6,596	4,050	580	6	6	6	0 =	18	180-250	O
Detroit												
Grace	E. K. Wietersen	37,867	74	4,879	335	2	2	2	0 =	6	275-350	FM
Harper	J. Reynolds	28,324	169#	16,950	104	3	3	3	0 =	9	275-325	PM
Henry Ford	W. R. Fuller	88,240	171	13,297	132	3	4	4	1 =	14	365-365	PM
Mount Carmel Mercy	J. M. Grace	56,284	19#	2,819	55	1	1	1	0 =	3	150-325	PM
Providence	W. A. Irwin	20,479	6	3,879	81	1	1	1	0 =	3	410-450	FM
Sinai	H. Feigelson	20,585	26	3,597	60	1	1	1	0 =	3	400-550	FM
Wayne State University Affiliated Hospitals												
Veterans Administration [211] (Dearborn)	E. F. Levine	28,420	10	3,810	107	2	2	2	0 =	6	270-317	O
Detroit Memorial [212]	J. F. Hofstrom	17,841	47	10,015	218	1	1	1	0 =	3	266-400	
Herman Kiefer	F. Harkaway	292,054				2	0	0	0 =	2	380-653	FM
Receiving [212]	J. Hofstrom	96,133	68	3,720	356	3	3	2	0 =	8	325-400	

Numerical and other references are listed on pages 811 through 814

27 RADIOLOGY—Continued

	Chief of Service or Program Director	No of X ray Examinations	No Radium Treatments	No Deep X ray Treatments	No Superficial X ray Treatments	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Main Maintenance FM PM O
MICHIGAN—Continued												
Eloise												
Wayne County General Hospital and Infirmary	I Zbikowski	55 379	7	1 678		1	1	1	0	= 3	403-464	FM
Flint												
Hurley	D R Limbach	30 999	52#	4 703	293	2	2	2	0	= 6	325-450	FM
McLaren General	P W Dorsey	49,282	9	1 427	22	1	1	1	0	= 3	375-425	PM
St Joseph	J F Livesay	27 232	31	517	49	1	0	1	0	= 2	425-525	PM
Grand Rapids												
Blogett Memorial	H C Jones	25 262	15	3 962	39	1	0	0	0	= 1	325 325	FM
Butterworth	F Wahby	26 254	4 588#	1 070	157	1	1	1	0	= 3	300-350	PM
Pontiac												
St Joseph Mercy	F Keeffe	98 230	32	2 873		1	1	1	0	= 3	375-435	PM
MINNESOTA												
Minneapolis												
Swedish	I G Idstrom											
University of Minnesota Hospitals [21,8]	H O Peterson	9 738	193	20 509	606	5	5	4	0	= 14	244-244	
Veterans Administration [2,9]	J Jorgens	75 761	23	3 507	105	5	5	5	4	= 19	271-462	O
Rochester												
Mayo Foundation [22]	C A Good D S Childs Jr	2 4 227	906	28 393	1 700	10	10	10	0	= 30	200-200	PM
St Paul												
Charles T Miller	J B Coleman	20 335	79 660#	4 703		1	1	1	0	= 3	325-375	PM
MISSISSIPPI												
Jackson												
University	R D Sloan	39 751	41#	4 968	45	2	2	2	0	= 6	250 300	O
MISSOURI												
Columbia												
University of Missouri Medical Center	G S Lodwick	18 242	29	3 889	67	1	1	1	0	= 3	200-300	
Kansas City												
Menorah Medical Center	D S Dann	22 831	15	1 632	85	1	1	1	0	= 3	300-400	FP
Research and Affiliated Hospitals												
Children s Mercy												
Kansas City General	J W Barry	37 721	47	2 256	164	1	1	1	0	= 3	220-265	PM
Research	A B Smith	18 187	33	1 040	6	1	1	1	1	= 4	200 300	O
St Luke s	I A Scarpellino	19 189	36	3 231	49	1	1	1	0	= 3	250-300	FP
St Louis												
Barnes	H Wilson	61 903	245	12 858	91	5	5	5	0	= 15	250 350	O
De Paul	F C Ernst Jr	16 370	46	1 991	215	1	0	0	0	= 1	200 250	FM
Homer G Phillips	W F Allen Jr	41 335	71	2 620	59	2	1	0	0	= 3	235 299	
Jewish	H R Senturia	25 607	43#	3 495	487	1	1	1	0	= 3	200 300	FM
St Louis City [3]	D C Weir	48 916	49	2 278		2	2	2	2	= 8	234 314	PM
St Mary s Group of Hospitals of St Louis University	J Sante	44 295	77	3 382	173	1	1	1	0	= 3	150-170	FMO
Veterans Administration [3]	D C Weir S Kamberg	43 104	7	2 212	35	2	2	2	0	= 6	271-462	O
NEBRASKA												
Omaha												
Creighton Memorial St Joseph	J F Kelly Sr	15 640	31	2 997	129	2	1	0	0	= 3	210 260	
Nebraska Methodist	H B Hunt	13 064	127	1 825	66	1	0	1	0	= 2	300-400	PM
University of Nebraska	H H Hunt	13 991	52	1 289	128	1	1	1	1	= 4	225-300	PM
Veterans Administration [11]	H B Satchek	22 015		1 872	17	1	1	1	0	= 3	270-347	O
NEW HAMPSHIRE												
Hanover												
Mary Hitchcock Memorial	J K Sycamore	33 411	77	4 466	769	2	2	2	0	= 6	218 273	
NEW JERSEY												
Camden												
Our Lady of Lourdes	C P Keefer C K McGeorge	24 386	315	1 692	80	1	1	1	1	= 4	250-350	PM
East Orange												
Veterans Administration	J R Nahon	26 924	2	2 243	76	1	1	0	0	= 2	270-462	
Jersey City												
Jersey City Medical Center	H J Perlberg	50 190	23	7 456	401	4	2	0	0	= 6	167 200	FM
Newark												
Newark Beth Israel	N J Furst J J Levinson	11 393	21	4 381	83	1	1	1	0	= 3	125 175	
NEW MEXICO												
Albuquerque												
Bataan Memorial Methodist	B Gordon	32 956	30	5 236	473	1	1	1	0	= 3	300 400	FP
NEW YORK												
Albany												
Albany	J E Roach	58 951	33#	9 609		1	1	2	0	= 4	195-275	PM
Veterans Administration	H Thomas	31 419		1 941	34	1	1	1	0	= 3	271 347	O
Buffalo												
Buffalo General	G J Culver	28 363	61#	5 296	121	2	1	1	0	= 4	175-200	FP
Deaconess	R F Seibel	16 000	31	304	4 504	1	0	0	0	= 1	300-350	FM
Edward J Meyer Memorial	F C Fechner	40 023	14	2 139	178	2	2	2	1	= 7	292 380	PM
Millard Fillmore	F H Schnap	30 991	61	2 576	212	1	1	1	0	= 3	298-323	PM
Roswell Park Memorial	F P Leseman W T Murphy	32 771	245	41 158	3 155	7	3	3	0	= 13	334 381	O
Veterans Administration	K Flachs	31 036	1	3 608	50	1	1	1	0	= 3	271 293	O
Hempstead												
Meadowbrook	H R Zatzkin	38 106	27	7 364	398	2	2	2	0	= 6	275-275	FM
Johnson City												
Charles S Wilson Memorial	B D Jay	21 188	11	1 606	304	1	1	1	0	= 3	225-300	PM
Mineola												
Nassau	N H Robin	18 161	21	3 974	219	1	1	1	0	= 3	325-375	O
New York City												
Bellevue Hospital Center Div III—New York University College of Medicine	M Poppel	375 583	118	4 063	395	2	2	2	0	= 6	145-195	
Beth El [2]	M Dannenberg	24 927	75	1 815		1	1	1	0	= 3	150-200	FM
Beth Israel [3]	A Geffen	19 704	12	1 763		3	1	1	0	= 5	175-190	PM

Numerical and other references are listed on pages 811 through 814

27 RADIOLOGY—Continued

	Chief of Service or Program Director	No of X ray Examinations	No Radium Treatments	No Deep X ray Treatments	No Superficial X ray Treatments	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Maintenance 0
NEW YORK, New York City—Continued												
Bronx	A J Bernstein	25,515	7	2 186	123	1	1	1	0	= 3	140-190	FM
Bronx Municipal Hospital Center	M Elkin	87,872	44	5,388	68	4	4	4	0	= 12	210-210	FM
Brooklyn	P J Lampros	17 349	47	1 894	213							
City Hospital at Elmhurst	P Strax	52 528	15	3 144	372	2	1	1	0	= 4	140 190	
Cumberland [274]	F Mendelson	26,183	11	420	8	1	1	0	0	= 2	145-190	
Flushing Hospital and Dispensary [275]	M Pomeranz	18,763	5	461	7	1	1	1	0	= 3	170-220	FM
Francis Delafield	W B Seaman	15 946	20	16 210	847	2	3	2	2	= 9	145 190	
Jewish	S Schwartz	31 220	46	2 740	149	2	2	1	0	= 5	100-120	FM
Kings County Hospital Center	H Z Mellins	157,300	123	9 158	460	5	5	5	0	= 15	145-190	
Lebanon	R M Friedenberg	16 684	9	1 404	61	1	1	1	0	= 3	120-150	FM
Lenox Hill	I H Ghiselin	33 600	23	3 690	64	1	1	1	0	= 3	240-300	PM
Lincoln [277]	R Feig	46,792	2			1	2	0	0	= 3	145 190	FM
Long Island College	R L Pinck	29 129	17	804	10	1	1	1	1	= 4	164 191	PM
Long Island Jewish [281]	B Epstein	19 152	8	1 464	45	1	1	1	0	= 3	120-190	FM
Maimonides	F J Levin	29 371	19	2 224	113	1	1	1	0	= 3	70-100	FM
Memorial Center for Cancer and Allied Diseases	R S Sherman	24 121	127	47,724		1	2	2	1	= 6	150-300	FM
Morristown Memorial (Morristown, N J)	F Reed, Jr	14 946	4	1 668	205	1	0	0	0	= 1	220 270	PM
James Ewing Memorial												
Methodist	N F Bartone	25 896	18	1 646		1	1	1	0	= 3	170-200	FP
Montefiore	H G Jacobson	53 248	90	16 550	3 019	5	4	4	0	= 13	207 282	PM
Morrisania City	I Flerstein	24 619	31	2 036	100	1	1	0	0	= 2	145 190	
Mount Sinai	B S Wolf	44 606	77	5 519		2	3	2	0	= 7	100 100	FM
New York	J A Evans	97 374	60	9 207	899	6	6	8	3	= 23	164 288	PM
New York Medical College—Metropolitan Medical Center												
Flower and Fifth Avenue	L J Borrelli	36 001	66	1,255	104	2	2	2	0	= 6	120-170	FM
Metropolitan	L J Borrelli	90 787	31	5 938	655	2	2	2	0	= 6	140 190	FM
New York Polyclinic Medical School and Hospital	W H Shehadi	18 271	59	857	156	1	1	1	0	= 3	150 200	FM
New York University Medical Center University	M H Poppel	150 651	127	1,473	9	4	1	0	0	= 5	140-190	FM
Presbyterian	W B Seaman	139 608	48	16 917		4	4	4	0	= 12	250 308	PM
Queens Hospital Center	A V Shapiro	40 800	119	2 054	440	2	1	0	0	= 3	140 190	
Roosevelt	A A Dunn	43 910	27	1 440	104	2	2	2	0	= 6	168 270	PM
St Luke's		45 429	75	6 384	310	2	2	2	0	= 6	120-170	FM
St Vincent's	F E Ruzicka Jr	40 605	20	5,374	135	2	3	2	1	= 8	170-250	FM
Veterans Administration (Bronx)	M H Poppel	59 804	110	11,077	473	3	4	4	0	= 11	270 821	0
Veterans Administration (Brooklyn) [294]	W Schlein	27 399	6	6 629	131	0	0	1	0	= 1	271 347	0
Veterans Administration (Manhattan) [295]	I R Lawrence	45 574	101	4 143	156	1	1	2	3	= 7	271 318	0
Rochester												
Genesee	G Baron	24 311	23	2 235	270	1	1	0	0	= 2	170 320	FM
Rochester General	L F Merrill	34 013	24	5 409	870	1	1	1	0	= 3	170-220	FP
St Mary's	A V Winchell H H Forsyth	21 947	14	576	1,270	0	1	0	0	= 1		
Strong Memorial-Rochester Municipal [298]	G H Ramsey	33 633	16#	2,046	215	5	5	5	2	= 17	166 291	0
Syracuse												
State University of New York Upstate Medical Center	C H Hale	19 140	49	4 753	104	4	4	4	0	= 12	250-350	0
Veterans Administration	L R Heitzman	19 449		16 000	13	1	1	1	0	= 3	271 347	
Valhalla												
Grasslands	H Lubatsky	18,609	4	1,829	203	1	1	1	0	= 3	170 220	FM
NORTH CAROLINA												
Chapel Hill												
North Carolina Memorial	L H Wood	31 716	124	2,087	95	2	2	2	0	= 6	170 266	0
Durham												
Duke University Affiliated Hospitals Duke	R L Reeves	61,347	97	3 468	262	4	4	3	0	= 11	43 300	FM
Veterans Administration	G W Brown	27 771	6#	1 334	12	1	1	1	0	= 3	270 462	0
Winston-Salem												
North Carolina Baptist	L Meschan	36,718	71#	6 073	120	2	2	2	0	= 6	166 208	PM
NORTH DAKOTA												
Bismarck												
Bismarck	H M Berg	29,860	45#	3 514	467	1	1	1	0	= 3	300 300	0
OHIO												
Akron												
Akron City	J P Moore	49 691	32	6 712	187	1	1	1	1	= 4	270-370	
Akron General	C J Miller	29 057	14	3,251	115	1	1	1	0	= 3	300 350	FM
Canton												
Aultman	S Larson	31 876	22	3,373		1	1	1	0	= 3	270-400	PM
Mercy	J J Dodd	30 612	28	4 231		1	1	1	0	= 3	270 300	PM
Cincinnati												
University of Cincinnati College of Medicine Hospital Group												
Cincinnati General [303]	B Nelson	62 653		4 472	152	4	3	5	0	= 14	100 140	FM
Good Samaritan	J J McCarthy	56 000	40	4 700	20	1	1	1	0	= 3	250-300	FM
Jewish	J S Rosenberg	26 686	71	2 901	46	1	1	1	0	= 3	190 250	FP
Cleveland												
Cleveland Clinic	C R Hughes	95,331	28	7 418	212	4	3	3	0	= 10	270 270	
Cleveland Metropolitan General	H Hauser	54 610	70	3 379	2 456	4	3	3	0	= 10†	190-258	FM
Huron Road	W D Heinrich	37 368	49	2,967	233	1	1	1	0	= 3	210-230	FP
Mount Sinai	G R Krause, M Lubert	28 429	19	4,663	99	1	1	1	0	= 3	210-270	FM
St Luke's	D D Brannan	37 758	79	4 563	399	1	1	1	0	= 3	200 270	FM
St Vincent Charity	J J O Malley	33 811	13	1 148		1	1	1	0	= 3	210 250	FP
University Hospitals of Cleveland	H L Friedell	70 882	47	9 520	231	3	3	3	0	= 9	150-250	PM
Veterans Administration [308]	M D Sachs	35 001	5	2,390	51	2	2	2	2	= 8	271-462	FM
Columbus												
Ohio State University Hospitals University	S W Nelson	52 862	1	11,959	207	5	5	0	5	= 15	177 277	PM
Dayton												
Miami Valley	G Nicoll	34,661	65#	3 530	120	1	1	1	0	= 3	225-250	FP
Veterans Administration [310]	H F Plaut	31 130	3	2,207	212	2	2	2	0	= 6	271 347	0

Numerical and other references are listed on pages 811 through 814

27 RADIOLOGY—Continued

	Chief of Service or Program Director	No of X ray Examinations	No Radium Treatments	No Deep X ray Treatments	No Superficial X ray Treatments	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	FM Main Teaching FM PM O
OHIO—Continued												
Elyria												
Elyria Memorial	D A Russell	19 822	8	678	41	1	0	0	0	= 1		FM
Lorain												
St Joseph	D A Russell	30 111	2	1 900		1	0	1	0	= 2	300 400	FM
Youngstown												
St Elizabeth	S Lamarkin	42 628	52	2 789	900	1	1	1	0	= 3	300-350	FM
Youngstown	J C Baker	32 399	48	7 190	2 014	2	2	2	0	= 6	275-375	FM
OKLAHOMA												
Oklahoma City												
University of Oklahoma Medical Center												
University Hospitals	C R Ridings	26 528	6	7 276	1 109	3	3	3	0	= 9	300-25	PM
Veteran Administration	S M Glaser	32 011		2 763	202	1	0	1	0	= 2	27 134	
Wesley	F H Kulmon	18 381	19	2 841	71	1	0	0	0	= 1	350-475	
Tulsa												
St Johns	J M Pancoast	30 919	22	6 709	712	1	0	1	0	= 2	175 250	FP
OREGON												
Portland												
Providence	C Nichols	20 774	14	1 732		1	1	0	0	= 2	275-295	FM
St Vincent	S F Rex	12 880	1	676		2	2	2	0	= 6	275-295	FM
University of Oregon Medical School Hospitals and Clinics	C L Dotter	40 824		3 247		3	3	2	0	= 8	165-215	FM
PENNSYLVANIA												
Abington												
Abington Memorial	C Sillers	29 142	40	5 914	150	1	1	1	0	= 3	275-400	FM
Allentown												
Sacred Heart	M Stamatako	1 831	212	1 984	140	1	1	1	0	= 3	225 275	FI
Bryn Mawr												
Bryn Mawr	R M Harvey	24 499	52	2 919	444	1	1	1	0	= 3	200 250	FI
Danville												
George F Geisinger Memorial	I I Williams	25 321	4	2 349	4 730	1	0	1	0	= 2	175-250	FM
Darby												
Thomas M Fitzgerald Mercy	F K Alexander	21 920	8	1 732	141	1	1	1	0	=	100-300	FM
Erie												
Hamot	F D Bacon	21 717	19	1,285		1	1	1	0	= 3	250-300	FM
St Vincent	R D Bacon	11,907	15	1 100		1	1	1	0	= 3	275 325	FM
Philadelphia												
Albert Einstein Medical Center												
Northern Division	I Gershon Cohen	29 415	21	1 571	87	2	2	2	0	= 6	125-200	FM
Southern Division	H Isard	24 655	38	2,344	58	1	1	1	0	=	125-200	FM
Episcopal	H Fisher	24 092	31	1 923	145	1	1	0	0	= 2	150-150	FM
Germantown Dispensary and Hospital	B R Young	26 978	47	4 472	100	1	1	1	0	= 3	175-200	FM
Graduate Hospital of the University of Pennsylvania	A Finkelstein	20 806	2	1 980	260	3	3	3	2	= 11	100-125	FM
Hahnemann Medical College and Hospital	F S Lehman	35 891	201	4 760	137	2	0	0	0	= 2	200-260	FM
Hospital of the University of Pennsylvania	F Lendergrass	90 000	10	20 548	720	6	6	6	6	= 24	458	PM
Children's	J W Hope	10 947		476	41	1	0	0	0	= 1	250	FM
Hospital of the Woman's Medical College of Pennsylvania	J H Vastine	10 188	11	1,256		1	1	1	0	= 3	125-175	FM
Jefferson Medical College	P F Hodes	28 582	70	11 761	67	4	7	1	0	= 12	100-150	FM
Nazareth	J S Letter	25 156	1	977	128	1	1	1	0	= 3	300 300	FM
Pennsylvania	J V Bishop	31 799	8	1 289	205	2	0	0	0	= 2	100-300	FM
Philadelphia General	B P Widmann	31 632	99	7,055	103	5		5	0	= 15	128-265	FM
Presbyterian	E J Lame	15 821	52	2 302	8	1	1	1	0	= 3	225-290	FM
Temple University	H M Stauffer	3 779	71	7 402	217	5	5	5	0	= 1	175-225	PM
Veteran Administration	C T Wohl	1 215	16	2 301	160	2	2	3	0	= 7	270 412	O
Pittsburgh												
Allegheny General	J B Childs	37 890	70	8 600	145	2	2	2	0	= 6	200 250	FM
Mercy	C R Ferryman	42 899	82	10 687		2	2	2	0	= 6	225-25	FM
Montefiore 340	H W Friedman	18 442		2 677	1	1	1	1	0	=	275 275	FM
Health Center Hospitals of the University of Pittsburgh School of Medicine												
Children's	D R Cardany	22 847		1 096								
Elizabeth Steel Magee	C N Chasler	13 287	104	1 712								
Presbyterian Woman's	F C Lasser	13 541	115	10 858	299	5	2	2	0	= 9	125 175	FM
Veteran Administration	S Loller	25,250	17	5 107	141	1	2	1	0	= 4	250-347	O
St Francis General Hospital and Rehabilitation Institute	C H Alexander	23 328	21	2 319	21	1	1	1	0	=	240-300	FP
Western Pennsylvania	W S Mellon	4 921	32	3 699		1	1	1	0	= 3	250 300	FI
Sayre												
Robert Packer	C L Littleton	30 918	40	18	8	2	1	1	0	= 4	225 5	FM
West Reading												
Reading	C W Chamberlin	17 980	71	5 062		2	2	2	0	= 6	225 300	FM
PUERTO RICO												
San Juan												
Veteran Administration (San Patricio) 316	I Ehrlich	9 692				1	1	0	0	= 2	18-408	O
Dr F Gonzalez Martinez Oncologic	V Marcial	600	191	22,958	620		3	3	1	= 10	250-400	FM
RHODE ISLAND												
Providence												
Rhode Island	J V Martineau	42 420	109	2 385	508	1	1	1	0	= 3	125-1	FM
Roger Williams General	R R Hunt	19 711	4	1 300	140	1	0	0	0	= 1	300 250	FM
SOUTH CAROLINA												
Charleston												
Teaching Hospitals of the Medical College of South Carolina	H S Pettit	45 040	122	6 746	45	2	1	1	0	= 4	1 105	FM
Medical College												
Roper												
TENNESSEE												
Chattanooga												
Baroness Erlanger	C W Reavis	38 731	42	6 741	52	1	2	1	0	= 4	325-375	

Numerical and other references are listed on pages 811 through 814

27 RADIOLOGY—Continued

	Chief of Service or Program Director	No of X ray Examinations	No Radium Treatments	No Deep X ray Treatments	No Superficial X ray Treatments	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Maintenance FM PM 0
TENNESSEE—Continued												
Memphis												
Baptist Memorial	J J Whitleather	32 000	62	5 124	95	2	2	2	1	= 7	325 400	PM
City of Memphis Hospitals	D S Carroll	31 654	61			2	2	2	0	= 6	150-200	FP
Methodist	J C King	32 517	42	4 539	359	3	2	2	0	= 7	325-375	FM
Veterans Administration [352]	B J Greenberg	61 377	12	5 480	308	2	2	3	0	= 7	271 347	PM
Nashville												
Vanderbilt University	H C Francis	31 198	135	1 552	78	3	2	2	0	= 7	100 125	FM
Veterans Administration	D F Sherman	21 750	27	2 242	151	1	1	1	0	= 3	270 462	0
TEXAS												
Austin												
Brackenridge	J C Rude	21 751	55	3 002	30	1	1	1	0	= 4	250-250	FM
Dallas												
Baylor University	J J Miller	12 569	273	10 404	136	2	2	2	0	= 6	210 230	PM
St Paul	M J Healy	17 284	63	449		1	1	1	1	= 4	225 300	FP
University of Texas Southwestern Medical School Affiliated Hospitals												
Parkland Memorial	F Bonte	55 762	59	2 506	1 100	2	2	2	0	= 6	150 200	PM
Veterans Administration [362]	B K Lovell	26,515	86	2 189	27	2	2	2	0	= 6	271 347	PM
Galveston												
University of Texas Medical Branch Hospitals	R N Cooley	73 455	152	8 064	243	4	4	4	0	= 12	160 160	FP
Houston												
Baylor University College of Medicine Affiliated Hospitals												
Jefferson Davis	V P Collins	58 190	53	250	89	2	2	2	0	= 6	125 165	FM
Methodist	C H Burge	21 515	4	2,404		0	2	0	0	= 2	100 175	FM
Veterans Administration	H I Barton	60 630	22	6 027	144	2	0	2	0	= 4	270-347	PM
Hermann	J M Vaughan	51 708	90	3 895	117	2	2	2	0	= 6	125-300	PM
St Joseph's	C W Yates	28 851	7	1 623	33	1	0	0	0	= 1	220-270	PM
University of Texas M D Anderson Hospital and Tumor Institute	G Fletcher	23 551	615	36 307	883	0	2	2	2	= 6	300 416	0
San Antonio												
University of Texas Post Graduate Medical School Affiliated Hospitals												
Baptist Memorial	H F Flinendorf Jr	15 051	57	1 206	98	1	1	1	0	= 3	200-350	FP
Robert B Green Memorial [367]	B D King	29 447	33	1 236	35	1	1	1	0	= 3	200 350	FM
Santa Rosa	J J O Neill	30 731	51	1 413	46	1	1	0	0	= 2	200 300	FP
Temple												
Scott and White Memorial	A W Sommer	49 197	77	5 021	593	1	1	1	0	= 3	300-300	0
UTAH												
Salt Lake City												
Dr W H Groves Latter Day Saints	J R Crowder	16 526	26	815	12	1	1	1	0	= 3	250 325	FP
University of Utah Affiliated Hospitals												
Holy Cross	R R Meyer	11 122	8	2 803		1	0	0	0	= 1		FP
St Mark's	H P Plenk	9 208	16	2 478	72	1	0	0	0	= 1	275	PM
Salt Lake County General [370]	W Christensen	19 457	172	5 119	115	2	2	2	0	= 6	240-300	0
Veterans Administration	D W Stowell	8 999	1	710		0	1	1	1	= 3	271 462	0
VERMONT												
Burlington												
University of Vermont Affiliated Hospitals												
De Goesbriand Memorial	F W Van Buskirk	14 014		904							208 208	
Mary Fletcher [105]	A B Soule Jr O S Peterson Jr	21 055	57	4 693	64	2	2	1	0	= 5	250	PM
VIRGINIA												
Charlottesville												
University of Virginia	V W Archer	58 139	60	9 700	517	5	2	1	0	= 8	75 150	FM
Norfolk												
De Paul	J Foster	23 325	29	2 994	301	1	1	1	0	= 3	225 275	FM
Norfolk General	C P Wisoff	29 598	59	2 669	25	1	1	1	1	= 4	290-400	FM
Richmond												
Medical College of Virginia—Hospital Division	J B Mandeville	51 860	92	5 486	610	1	3	1	0	= 5	225 250	FM
Veterans Administration [372]	W H Mendel	29 458	7	2 457		2	2	2	0	= 6	271 412	PM
WASHINGTON												
Seattle												
Providence [118]	J A Addington	19 030	50#	608	64	1	1	1	0	= 3	250 350	FP
University of Washington Affiliated Hospitals												
King County Hospital Unit No 1 (Harborview)	G N Hadden	24 901	47#	123		3*	3	3	0	= 9	150 275	FM
University	M M Finley	1 426	3#	104		3	3	3	0	= 9	180 300	PM
Veterans Admin	M M Finley	12 405	2	1 498		1	0	0	0	= 1	271 271	
Virginia Mason	F Carlile	38 173	58	8 316	583	1	1	1	0	= 3	250 325	PM
Spokane												
Sacred Heart	C Stevenson	19 734	12	629		1	1	1	0	= 3	250-325	FP
WISCONSIN												
Madison												
University Hospitals	L W Paul	45 441	171	8 933	380	3	4	5	0	= 12	100-200	FM
Milwaukee												
Columbia [384]	S A Morton	20 891	29#	2 713	676	1	0	0	0	= 1	270-320	PM
Evangelical Deaconess	A Melamed	32 884	20	4 369	156	1	1	1	0	= 3	300-350	FP
Milwaukee County	J E Ambrose	66 909	29	5 105	316	1	2	3	0	= 6	220 331	
Milwaukee	J Armbruster H W Hofke	31 408	178	6 925	120	1	0	0	0	= 1	281 357	PM
Mount Sinai	M Moel	21 823	24	2 249	9	1	1	1	0	= 3	300-350	FM
St Joseph's	G W Sengpiel	30 016	30	4 270	143	1	1	1	0	= 3	300-350	PM
St Luke's	H Wright	18 020	20	4 802	250	1	1	1	0	= 3	275-375	FM
Veterans Admin (Wood)	R V McAllister	40 423	30	5 727	217	2	1	0	0	= 3	271 347	PM

Numerical and other references are listed on pages 811 through 814

28 SURGERY

Residency programs in the following hospitals have been approved by the Council, the American Board of Surgery and the American College of Surgeons through the Conference Committee on Graduate Training in Surgery for FOUR OR MORE years of training, designed to qualify the trainee for examination by the American Board of Surgery as a Group I candidate

Hospitals 362 Residencies, 4519

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance
UNITED STATES AIR FORCE													
TEXAS													
U S Air Force **San Antonio**	I I Jernigan	1 [illegible]	3 3[illegible]#	39	87	17,77[illegible]	3	3	3	3	= 12		
UNITED STATES ARMY													
CALIFORNIA													
Letterman General **San Francisco**	I F Graham	[illegible]	4 [illegible]	40	83	21 332	2	2	2	2	= 8		FM
COLORADO													
Fitzsimons General **Denver**	I A Bergman	40	[illegible]	17	85	3 966	2	2	2	2	= 8		
DISTRICT OF COLUMBIA													
Walter Reed General **Washington**	J J Patton	18	1 066	42	88	37 228	3	3	3	3	= 12		
HAWAII													
Tripler Army **Honolulu**	W F Bowers	289	6 092	2	69	59 481	2	2	2	2	= 8		
TEXAS													
William Beaumont General **El Paso**	R I Rhea Jr	37	2,500	30	87	9 571	2	2	2	2	= 8	394 [illegible]	PM
Brooke General **San Antonio**	D Campbell	123	2 962	113	76	7 708	3	3	3	3	= 12		
UNITED STATES NAVY													
CALIFORNIA													
U S Naval **Oakland**	M I Gerber	201	2 037	53	95	13 769	2	2	1	3	= 8		
U S Naval **San Diego**	I M Hunner	222	4 403	94	88	14 383	2	3	2	3	= 10		
ILLINOIS													
U S Naval **Great Lakes**	S Fels	120	1 858	11	100	4 580	2	0	2	1	= [illegible]		
MARYLAND													
U S Naval **Bethesda**	R B Brown	183	2 402	52	94	7 995	2	2	1	2	= 7		
MASSACHUSETTS													
U S Naval **Chelsea**	I I Haynes	190	2 386	21	89	4 142	2	1	1	1	= [illegible]		
NEW YORK													
U S Naval **New York City** (St Albans)	J J Timmes	191	2 404	64	69	4 824	2	2	2	0	= 6		
PENNSYLVANIA													
U S Naval **Philadelphia**	H D Warden	172	2 6[illegible]	56	64	7 492	2	1	2	1	= 6		
VIRGINIA													
U S Naval **Portsmouth**	H F Lenhardt	542	4 771	63	75	41 90[illegible]	4*	2	1	3	= 10		
UNITED STATES PUBLIC HEALTH SERVICE													
CALIFORNIA													
U S Public Health Service **San Francisco**	W A Williamson	100	1 788	83	66	7 140	1	1	1	1	= 4		
DEPARTMENT OF HEALTH EDUCATION AND WELFARE													
DISTRICT OF COLUMBIA													
Freedmen's **Washington** [illegible]	B Sylvax	45	1 459	71	79	10 881	4	2	2	2	= 10	308 417	PM
NONFEDERAL AND VETERANS ADMINISTRATION													
ALABAMA													
Birmingham													
University of Alabama Affiliated Hospitals													
University Hospital and Hillman Clinic	C Lyons	165	4 082	187	46	9 389	10	10	6	6	= 32	210 288	FM
Veterans Admin	M B Sullivan	34	993	30	57	2 052	6*	2	3	2	= 13†	271 412	O
Fairfield													
Lloyd Noland	I M Slaughter	86	2 516	31	3	24 111	2	2	1	1	= 6	250-375	FM
Mobile													
Mobile General	C Donald		1 621	84	55	5 377	2	2	2	2	= 8	300-700	PM
ARIZONA													
Phoenix													
Maricopa County General	R B Leonard	65	1 300	77	40	5 850	3	2	2	2	= 9	73 423	PM
ARKANSAS													
Little Rock													
University													
Veterans Admin	J H Crowdon	51	1 795	82	41	12 944	4	4	2	4	= 14	170-[illegible]	O
	R T Lipan	162	[illegible] 517	48	81	1 317	4	3	1	1	= 9	254 412	O
CALIFORNIA													
Fresno													
General Hospital of Fresno County	M Levin	91	2 070	165	48	12 861	3	2	0	2	= 7	300 325	PM
Long Beach													
Veterans Admin [illegible]	I A Weinberg	174	2 048	88	52	6 153	3	3	3	3	= 12	271-462	O
Los Angeles													
Cedars of Lebanon	H Lippman												
Los Angeles County	C I Berne C F Stafford	123	7 548	107	53	14 789	7	4	1	1	= 13†	265-400	FM
University of California [illegible]	W I Longmire Jr	176	6 052	400	48	14,248	4	4	4	8	= 20	273 319	PM
Veterans Admin [illegible]	J S Clarke	54	3 437	56	83	5 398	6*	2	2	2	= 12†	240-426	FPO
White Memorial [illegible]	A I Kugel	208	3 034	101	71	2 262	12*	4	4	4	= 24	271-463	PM
Oakland													
Highland-Alameda County [illegible]		32	1 645	64	73	5 447	2	2	2	1	= 7	215-289	PM
Kaiser Foundation	A Hunnicutt	57	1 [illegible]	104	51	8 602	8	4	3	3	= 18	200-295	FM
Veterans Admin	A J Bartell	100	5 088	116	62		4	2	2	1	= 9	315-529	FM
	F V Smith	255	3 047	144		2 367	8	3	2	0	= 8	271 462	

Numerical and other references are listed on pages 811 through 814

28 SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Teaching FM PM 0
CALIFORNIA—Continued													
Orange													
Orange County General	L F Ellmore, S Gendel	46		101	71	2 141	1	1	1	1	= 4	300-390	0
Palo Alto													
Stanford Medical Center and													
Affiliated Hospitals													
Palo Alto-Stanford Hospital Center	J G Allen	23	1,120	2		876	4	7	3	3	= 17	250 320	0
Veterans Admin													
San Diego													
San Diego County General	R A Jones	40	1,026	100	63	3 507	4	2	2	2	= 10	250 400	FM
San Francisco													
Kaiser Foundation	D W Barrow	91	5 005	81	61	107,904	2	2	2	1	= 7	315-500	FP
Mount Zion	L D Roseman		3,124#	60	62	8,616	4*	3	1	1	= 9	150-350	FM
Presbyterian Medical Center	V Richards	56	2,142	95	76	10 456	6	4	4	4	= 18	100-175	PM
San Francisco General	C Lyon	148	4,933	249	41	40 081	7	1	4	0	= 12	220 360	0
University of California Service													
Southern Pacific General	W L Newberg	144	7,048	38	63	41 359	3	3	2	1	= 9	200-350	FM
University of California Hospitals [102]	I Goldman	48	1,811	58	83	7 402	9*	9	8	6	= 32†	243 426	
Veterans Admin [103]	J L Wilson	93	1,290	56	79	2 679	4	3	3	2	= 12	271 462	0
San Jose													
Santa Clara County	G B Armanini	36	850	73	64	4 769	2	2	1	1	= 6	270-320	PM
Santa Barbara													
Santa Barbara General—Santa Barbara Cottage													
Santa Barbara Cottage	J G Fiske	74	3 980	47	62		4*	2	2	1	= 9	200-250	FP
Santa Barbara General	J C Fish	104	4 623	80	71	877							
Stockton													
San Joaquin General	W Brock	93	1 460	80	80	10 869	2	2	2	1	= 7	270-340	PM
Torrance													
Harbor General	B D Averbook	59	1 462#	177	57	6,713	4	4	3	3	= 14	243 319	FM
COLORADO													
Denver													
St Joseph's	F B McGlone	115	6 178	98	66		3	3	2	1	= 9	200-300	FM
University of Colorado Medical Center													
Colorado General	H Swan	48	1,060	88	76	4 106	4*	4	3	5	= 16	180 200	0
Denver General	D Watkins	63	1,341#	82	74	9,261						179-200	
Veterans Admin	B Eiseman	65	1 558	53	90	2,421	5	5	4	3	= 17	271-462	0
CONNECTICUT													
Bridgeport													
Bridgeport [118]	J Nolan	92	3 926	125	34	1 618	1	1	1	1	= 4	240 340	FM
St Vincent's	W Curley	146	7 637	171	41	3 143	2	2	2	2	= 8	300-400	PM
Hartford													
Hartford	W A Standish	228	10 382	112	53	608	9	4	4	4	= 21	125 282	FP
St Francis [120]	J St John	196	8 604	182	44	13,389	2	2	2	2	= 8	175 300	FP
New Britain													
New Britain General	B B Clark	135	6 862	78	70	14 932	2	1	1	1	= 5	250 325	FM
New Haven													
Yale-New Haven Medical Center													
Grace-New Haven Community	G J Lindskog	100	3 801	92	65	5 616	6	8	8	1	= 23	50 200	FM
Veterans Admin (West Haven)	W W Lindenmuth	135	2 317	81	80	4 191	3	3	1	2	= 9	271-412	
Waterbury													
Waterbury	C H Cole	118	4 741	124	46	1,211	1	1	1	1	= 4	225-300	FM
DELAWARE													
Wilmington													
Delaware	C J Munson	97	3 341#	114	80	8 521	2	2	1	1	= 6	220-280	FP
Memorial	J C Pierson	90	4,151	63	68	4 163	2	1	1	1	= 5	225-285	FP
DISTRICT OF COLUMBIA													
Washington													
District of Columbia General	B Blades, R J Coffey	69	1,826	152	40	9 981	4	4	2	2	= 12	233 308	0
Georgetown University Service													
George Washington University Service													
Georgetown University [126]	R J Coffey	88	3 057	87	51	2 817	11*	6	4	3	= 24	175-270	FM
George Washington University [132]	B Blades	115	6,210	55	79	3 358	4	4	2	1	= 11	210-285	PM
Providence	J J Goffredi	135	9 054	126	51	7 965	2	2	1	1	= 6	350-450	PM
Veterans Admin [133]	G A Higgins	97	1 374#	80	63	2 049	2*	2	0	2	= 6†	271 412	0
Washington Hospital Center	J A Gould	199	8 444	190	55	13 913	8*	8	3	3	= 17	215 260	FP
FLORIDA													
Coral Gables													
Veterans Admin	M W Wolcott	136	2 449	124	95	4 291	6*	3	3	3	= 15	271 470	0
Gainesville													
University of Florida													
Teaching Hospital and Clinics	I R Woodward	42	650	28	100		6	2	2	4	= 14	217-450	
Jacksonville													
Duval Medical Center	K A Morris	63	3 041	114	49	21 892	4*	2	2	2	= 10	200-275	FM
St Vincent's [141]	A C Williams	92	4 371#	89	44	1 704	2	2	2	2	= 8	325 400	PM
Miami													
Jackson Memorial [144]	J J Parrell		4,601	196	46	7,747	11	6	5	5	= 27	200-335	PM
GEORGIA													
Atlanta													
Emory University [150]	J D Martin Jr	122	5,602#	135	48		8	0	0	2	= 10†	235 265	PM
Georgia Baptist	J P Wilson	154	9 501	115	44	1 071	3	2	1	0	= 6	330 380	PM
Grady Memorial	J A Ferguson	111	3 233	228	43	33 425	12	8	6	3	= 29	100 200	FM
Piedmont	J W McRae	113	5,696	80	48	4 802	1	1	1	1	= 4	200-335	PM
St Joseph's Infirmary	J W Veatch Jr	104	5 942	75	57	3 244	3	3	1	1	= 8	270-300	PM
Veterans Admin [148]	J C Thoroughman	115	1,784	64	53		0	5	5	3	= 13	293-462	
Augusta													
Medical College of Georgia Hospitals	W H Moretz												0
Eugene Talmadge Memorial	W Moretz	48	860	45	71	3 423	10	6	5	5	= 26	250-583	0
University	G M Kelly	75	3 657	75	82	3,739	1	1	1	1	= 4	200 275	0
Veterans Admin	C M Rhode	143	2 499	41	68	3 750	4	1	1	1	= 7	270-462	

Numerical and other references are listed on pages 811 through 814

28 SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O
HAWAII													
Honolulu													
Queen's	J F Strode	141	2 474	34	60	3 820	2	2	2	1	= 7	220-370	FM
ILLINOIS													
Chicago													
Cook County	M E Liechtenstein	471	13 644	1 188	41	17 601	7	7	7	7	= 28	140-140	FM
Illinois Central	C C Guy			77	51		1	1	1	1	= 4	305-335	FM
Mercy [154]	J L Keeley	100	2 557	115	46	6 773	4	3	2	0	= 9	225-300	FM
Michael Reese	N N Crohn	98	2 942	34	67	4 956	5*	3	2	2	= 12	125-225	FP
Mount Sinai	J M Greene	86	3 131	86	42	9 670	2	2	2	2	= 8	225-300	PM
Northwestern University Medical Center													
Chicago Wesley Memorial	W Maddock	123	3 529	105	39	2 446	5	1	1	1	= 8	125-200	FM
Passavant Memorial	I Davis	44	1 885	41	59						= 10	225-275	PM
Veterans Admin Research	F W Preston	53	1 839	70	81		8	4	3	3	= 18	271-462	O
Evanston (Evanston)	J M Dorsey	66	2 830	43	81	1 048	2	2	2	1	= 7	225-275	PM
Presbyterian-St Luke's	F J Beattie Jr	238	8 604	124	70	4 597	10*	4	4	4	= 22	125-200	FM
University of Chicago Clinics	W F Adams	192	4 005	161	80	56 542	5	4	4	4	= 17	250-305	O
University of Illinois Research and Educational Hospitals	W H Cole	80	2 048	97	71	13 334	4	4	4	4	= 16	160-245	PM
Veterans Admin (West Side) [159]	M I Cibbel	176	3 341	88	81	4 636	4	3	3	3	= 13	270-412	O
Evanston													
Evanston — See Northwestern University Medical Center Chicago													
St Francis	D P Slaughter	98	3 892	71	57	6 806	2	2	1	1	= 6	260-290	FM
Hines													
Veterans Admin [15]	C Puestow	705	2 437	277	55	4 308	19*	9	9	8	= 45	271-412	O
INDIANA													
Indianapolis													
Indiana University Medical Center Affiliated Hospitals													
Indiana University Medical Center	H B Shumacker	135	1 265	57	88	5 000	10*	3	3	2	= 18	225-300	PM
Veterans Admin	R E Lempke	142	2 448	110	74	2 718					= 5	271-462	O
Marion County General	H F Becker	75	1 748	158	50	9 390	3*	3	3	3	= 12	269-348	PM
IOWA													
Des Moines													
Iowa Methodist [11]	J B Priestley	95	3 883	92	46		3	3	2	2	= 10	200-275	FM
Veterans Admin	J T Palumbo	91	3 327	54	93	1 600	4	4	4	4	= 16	271-412	PM
Iowa City													
State University of Iowa Hospitals	R T Tidrick	113	3 305	154	72	14 965	9*	5	5	5	= 24	200-285	FM
Veterans Admin	F S Brintnall	144	1 815	86	83	1 798	6	4	2	2	= 14	270-462	PM
KANSAS													
Kansas City													
University of Kansas Medical Center	E Allbritten	48	1 601	118	75	2 949	8	4	4	4	= 20	125-200	PM
Veterans Admin (Kansas City Mo)	T C Orr Jr	77	1 965	67	73						= 7	271-271	O
Wadsworth													
Veterans Admin [14]	W Brauer	110	908	33	55	1 086	6*	2	2	2	= 12	271-462	PM
Wichita													
St Francis	J H Holt	103	4 706	51	97	2 593	2	2	2	2	= 8	275-325	FP
KENTUCKY													
Lexington													
St Joseph [17]	C C Johnston	34	1 503	31	25	1 343	4*	2	2	1	= 9	220-250	FP
Louisville													
University of Louisville Medical Center													
Children's	H B Lynn		3 498#	44			0	0	1	1	= 2	120-300	FM
Louisville General	R J Noer	67	2 234	175	54	23 163	8	5	5	5	= 23	116-200	FM
St Joseph Infirmary	J T Giannini	168	8 324	93	42	1 137	4	3	2	1	= 10	220-260	PM
Veterans Admin	J J Hamilton	98	1 552	80	79	2 881	5*	3	3	3	= 14	270-347	O
LOUISIANA													
New Orleans													
Charity Hospital of Louisiana													
Independent Unit	R Kahle	62	2 049	81	47	13 499	3	3	3	3	= 12	125-200	FM
Louisiana State University Unit	J D Rives	105	3 629	192	51	27 134	10	8	5	2	= 25	125-200	FM
Tulane University Unit	O Creech	95	2 703	157	69	23 149	6	6	6	5	= 23	125-200	FM
Ochsner Foundation [18]	A Ochsner	41	1 565	50	92	9 085	4	4	4	4	= 16	225-	PM
Veterans Admin [164]	J K Richardson	132	1 993	117	68	2 840	6	2	2	2	= 12	270-412	O
Shreveport													
Confederate Memorial Medical Center	C J Black	141	5 165	229	25	17 466	6	4	4	3	= 17	125-300	FM
MAINE													
Portland													
Maine Medical Center	F H Drake	53	2 474	76	43	3 355	2	2	2	2	= 8	175-250	FP
MARYLAND													
Baltimore													
Baltimore City Hospitals	M M Ravitch	68	1 182	81	45	5 636	6*	6	4	1	= 17	150-250	FP
Church Home and Hospital	O C Brantigan	123	3 096#	48	52	4 335	4	3	2	1	= 10	200-325	FP
Franklin Square	H E Wiggis	39	1 601#	25	80	3 110	3	1	1	1	= 6	225-250	FM
Johns Hopkins	A Blalock	112	4 052#	146	67	4 247	6	2	5	4	= 17	160-335	PM
Maryland General	C T Flotte	121	4 936	90	48	1 998	5	3	2	1	= 11	225-300	PM
Mercy	D J Pessagno	80	2 884	55	49	6 005	2	2	1	1	= 6	275-325	PM
St Joseph's	O C Brantigan	99	4 085	55	45	6 290	6	2	1	0	= 9	225-250	FM
Sinai	A M Seligman	63	2 761	83	54	10,519	6	2	2	2	= 12	130-300	FM
South Baltimore General	W J Sullivan	67	2 267	50	26	4 995	3	2	2	1	= 8	200-250	FP
Union Memorial	H F Wiggis	136	5,346	117	37	11 631	5	4	2	1	= 12	215-250	FM
University	R W Buxton	93	2 999	109	67	14 170	8	6	5	4	= 23	200-250	PM
Cheverly													
Prince George's General	S Schwartzbach	91	5 500	80	66	2 958	2	2	2	0	= 6	300-300	FM
Fort Howard													
Veterans Admin	J Miller	109	1 027	44	66	435	4	2	2	2	= 10	271-271	O
Perry Point													
Veterans Admin	R T Shackelford	83	1 004	28	93	987	1	1	1	1	= 4	280-462	O

Numerical and other references are listed on pages 811 through 814

28 SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Affiliance
MASSACHUSETTS													
Boston													
Beth Israel [191]	I Fine	126	5 612			23 070	6	8	1	2	= 17	167 250	0
Boston City													
I Surgical Service	R A Deterling, Jr	80	1 873	106	46	19 400	8*	6	3	3	= 20	158-248	FM
III Surgical Service	J I Byrne	90	1,895	95	51	19 072	6*	3	3	3	= 15	158-248	FM
V Surgical Service [19]	C C Lund	72	1 848	74	69	20 433	6*	6	5	5	= 22	158-248	FM
Carney [193]	C J Shea	161	6 426	158	47	5 968	3	3	3	2	= 11	175 250	FP
Massachusetts General	L D Churchill					14,362	10	9	8	10	= 37	108-18	FM
Massachusetts Memorial-Veterans Admin													
Massachusetts Memorial	R H Smithwick	43	1 725	47	74	2 896	6	5	6	4	= 21	175-275	0
Veterans Admin [340] (Providence, R I)	H W Harrower	122	2 170	86	70	3 361	3	4	3	2	= 12	270-462	0
New England Center	R A Deterling, Jr	47	1 939	30	80	4 766	5	5	3	2	= 15	237 304	0
Peter Bent Brigham [10]	F D Moore	191	3 716	162	71	8 988	6	6	4	4	= 20	42 167	FM
St Elizabeth's	J W Spellman	139	5 869	93	58	5 348	2	2	2	2	= 8	175 250	FM
Veterans Admin (Jamaica Plain) [20]	H H Laxon	96	2 647	109	83	5,902	8*	8	4	4	= 24		
Cambridge													
Cambridge City	F B Vernaglia	52	1 470	108	23	5 120	1	1	1	1	= 4	170 233	PM
Quincy													
Quincy City—Brockton													
Quincy City [200]	J M McGowan	92	4 828	102	40	859	1	1	1	1	= 4	199 350	FM
Brockton (Brockton)	F J Hanley	78	3,010	48	41							250-250	FM
Springfield													
Springfield	J V Scola	160	6,745	145	48	3,828	6	4	2	2	= 14	125 225	FP
Worcester													
Memorial	G R Dunlop	117	4 270	100	63	2 023	3	2	2	1	= 8	200-275	FM
St Vincent	J C McCann	190	8 293	152	55	1,476	4*	2	2	1	= 9	175-250	FP
Worcester City	J Croce	36	2 130	75	47	5 718	4	2	1	1	= 8	250-335	PM
MICHIGAN													
Ann Arbor													
St Joseph Mercy	J T Thieme	52	2,001	33	60	31	4	2	2	2	= 10	310-410	FM
University [208]	C G Child III	88	2 356	102	73	14,138	18*	12	5	6	= 41	180 275	0
Detroit													
Detroit Memorial	J Mark	78	2 742	26	42		1	1	1	1	= 4	425 500	
Grace	D W McLean	205	7 554	128	59	2,891	4	4	4	4	= 16	275-350	FP
Harper	F A Oslus	111	4 722#	122	49	2 669	12	4	3	3	= 22	275-350	PM
Henry Ford	J S Lallis	200	6,610	163	71	67 693	22	14	10	8	= 54†	265 365	PM
Mount Carmel Mercy	W S Carpenter	228	9 827#	169	41	1,536	4	2	2	2	= 10	450-525	PM
St John	C Lades	69	2 041	25	14		1	1	1	1	= 4	325-400	FM
Sinai	M Sorock	79	3 646	39	62	2 421	2	2	2	2	= 8	300-400	FM
Wayne State University Affiliated Hospitals													
Receiving	C Johnston	163	4 903	207	51	23,417	5	6	3	5	= 19	325 400	PM
Veterans Admin	C G Johnston	229	5 221	164	68	5,491	4	4	3	3	= 14†	270 412	0
Eloise													
Wayne County General Hospital and Infirmary	W W Glas	186	3 653	507	46	9,783	4	4	3	3	= 14	403-490	FM
Flint													
Hurley	M Dodds	126	4 701#	93	53	1,543	2	2	2	2	= 8	325-450	FM
McLaren General [211]	C W Colwell	128	6,681	85	40		3*	2	1	1	= 7	375-450	PM
Grand Rapids													
Blodgett Memorial	D S MacIntyre	90	3 793	92	79	210	3	0	0	0	= 3	325-350	PM
Butterworth	W McDougal	155	6,868#	115	68	310	2	2	2	2	= 8	300 375	PM
Highland Park													
Highland Park General	J A Witter	111	4 891#	82	34	897	2	2	2	2	= 8	325-400	FM
MINNESOTA													
Minneapolis													
Minneapolis General	C R Hitchcock	72	1,848	157	74	13,507	5	4	4	5	= 18	235 235	FM
University of Minnesota Hospitals	O H Wangensteen	84	2,175	201	89	7,175	7	6	6	11	= 30	244 244	
Veterans Admin [221]	D J Ferguson	146	1,884	106	83	5 976	4	3	8	6	= 21	271-462	0
Rochester													
Mayo Foundation and Clinic [22]	J M Waugh		10,980	272	81		25*	20	20	20	= 85	200-335	PM
Saint Paul													
Ancker	I D MacLean	92	2 150	170	66	11,647	2	2	2	2	= 8	235 255	FM
MISSISSIPPI													
Jackson													
University of Mississippi Medical Center													
University	J D Hardy	4	1,428#	52	56	4 366	6	6	4	4	= 20	250-300	0
Veterans Admin	J H Conn	141	2 039	79	77		3	0	1	1	= 5	270-462	
Vicksburg													
Vicksburg	W H Parsons	20	1,444	43	27		1	1	1	0	= 3	100-300	FM
MISSOURI													
Clayton													
St Louis County	D Sauer	42	1,933	93	58	19 558	2	2	2	2	= 8	250 350	FM
Columbia													
University of Missouri Medical Center	H Stephenson	57	1,250	61	69	5,123	8	6	4	2	= 20	200-300	
Kansas City													
Kansas City General	R R Coffey	52	1 946	142	46	14 612	2	2	2	2	= 8	220-320	PM
St Louis													
Barnes	C Moyer	103	3 012	115	65	7 335	15	10	3	4	= 32	250-175	FM
Homer G Phillips	C Moyer	102	2 878	138	47	6 550	10	5	4	4	= 23	235-314	FM
Jewish	M D Pereira	111	4,848#	68	64	6,099	3	2	2	2	= 9	200-300	
St Louis City [233]	C A McAfee	87	2 680	211	59	9 811	8	5	3	3	= 19	234 314	PM
	I V Mulligan	115	4 299#	106	58	2,557	3	2	2	1	= 8	250-350	FM
St Luke's	C E Lischer	139	4,190	153	71	6,703	4	4	3	2	= 13	150-170	FM
St Mary's Group of Hospitals of St Louis University	C R Hanlon	66	1,110	65	57		2	2	2	2	= 8	271-462	0
Veterans Admin-St Louis University Service	R T Mainly a	67	1,262	69	75		2	2	2	2	= 8	271-462	0
Veterans Admin [236] Washington University Service	F B Hershey												

Numerical and other references are listed on pages 811 through 814

28 SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Affiliation FM PM O
NEBRASKA													
Omaha													
Creighton Memorial-St Joseph	B R Walske	163	5,007	110	42	1 101	4	4	3	3	= 14	210-285	FP
University of Nebraska [38]	M M Muschman	32	719	47	72	3,344	2	3	3	1	= 9	225-300	PM
Veterans Admin [242]	W P Kleitsch	105	2 794	82	78	1 017	2	2	2	2	= 8	270-412	O
NEW HAMPSHIRE													
Hanover													
Dartmouth Medical School Affiliated Hospitals													
Mary Hitchcock Memorial	R E Wiemann	100	2 647	74	84	20 770	8	5	5	2	= 20	218-325	
Veterans Admin (White River Jct Vt)	W B Crandell	100	2 647	74	84	20 770	8	5	5	2	= 20	218-325	
NEW JERSEY													
Jersey City													
Jersey City Medical Center	E J Halligan	191	5 024	294	35	14 312	8	8	5	5	= 26	108-200	FM
Newark													
Newark Beth Israel	M Kern	92	4 317	101	42	14 221	1	1	1	1	= 4	125-175	FM
Orange													
Orange Memorial	W H Glas	25	1 182	23	26	2 187	1*	1	1	1	= 4	225-300	FM
NEW MEXICO													
Albuquerque													
Veterans Admin-Bernalillo County Indian	F N Wilson	100	1,945	50	98	489	6*	4	3	2	= 15	271-462	O
NEW YORK													
Albany													
Albany [74]	C Eckert	101	3 557‡	119	60	4 742	7*	6	5	3	= 21	195-215	PM
Veterans Admin	J A Nelson	180	1 959	119	71	10 694	4	4	3	2	= 13	271 347	O
Buffalo													
Sisters of Charity	E Zuepfel	165	6 519	126	31	1 115	2	2	2	2	= 8	335-440	FM
Buffalo General [ ]	J R Paine	110	3 151‡	107	60	3 217	5*	4	4	2	= 15	175-200	FP
Edward J Meyer Memorial	J D Stewart	122	2 240	218	55	16 135	3	3	3	3	= 12	292 350	PM
Millard Fillmore	H N Kenwell	153	5 411	64	53		3	2	3	3	= 11	298-323	PM
Veterans Admin [ ]	W M Chardack	280	2 095	88	55	5 452	4	4	3	3	= 14	271 347	
Cooperstown													
Mary Imogene Bassett	E H Towers	52	1 207	26	73	11 218	2*	1	1	1	= 5	200-350	PM
Hempstead													
Meadowbrook	J N Shell	85	2 459	256	42	6,285	5	3	3	3	= 14	275-275	FM
Mineola													
Nassau	J J Montgomery	108	4 974	131	40	1 387	2	2	2	2	= 8	325-425	O
New York City													
Beekman-Downtown	S Make	65	1 859	17	53	7,984	3	2	1	1	= 7	200-275	FM
Bellevue Hospital Center													
Div I—Columbia University [91]	K M Lewis Sr	66	1 797	84	58	6 942	7	2	2	2	= 13	145-195	
Div II—Cornell University [13]	C W Holman	80	2 008	83	48	10 238	9	4	3	2	= 18	145-195	
Div III—New York University College of Medicine [17]	J H Mulholland	193	2 708	56	44	10 973	8	4	3	3	= 18	145-195	
Div IV—New York University Post Graduate Medical School [6]	L R Slattery	75	2 402	52	42	16 583	3	3	2	2	= 10	145-195	
Beth El	C B Ripstein	115	3,286	58	33	8,346	2	2	2	2	= 8	150 200	FM
Beth Israel	L Cimzburg	90	2 818	54	39	3 691	4	1	1	1	= 7	175-225	PM
Bronx	R Friedlander	80	3 018	80	36	10 305	4*	2	2	2	= 10	145-195	FM
Bronx Municipal Hospital Center	D State	76	1 873	181	47	18 021	8*	7	4	4	= 23	215-	FM
Brooklyn	K H MacGregor	103	4,230	79	41	26 428	4	2	2	2	= 10	175 220	FM
Coney Island	J F Hammett	147	4 422	184	49	13 333	3	3	3	3	= 12	145-195	
Flushing Hospital and Dispensary [ ]	C N Baker	98	4 517	68	24	11 633	1	1	1	1	= 4	175-250	FM
Harlem	A D Maynard	160	1 077	64	48	23 870	4	4	4	4	= 16	145-195	
Jewish	J Berger		3 233	118	39	5 844	4	2	2	2	= 10	100 150	FM
Kings County Hospital Center	C Dennis	335	6 415	647	22	18 057	8	8	8	8	= 32	145-195	
Knickerbocker	P D Allen	94	2 516	45	47	5 433	3	3	2	2	= 10	150-225	PM
Lenox Hill	H C Maier	136	5 155	86	20	13 472	2	2	2	2	= 8	180-220	PM
Lincoln	F H Amendola	92	3 497	143	56	19 661	5	3	3	0	= 11	145-195	FM
Long Island College	R A Mainzer	117	3 301	87	38	11 092	2	1	1	1	= 5	164 191	PM
Long Island Jewish	P Fear	61	2 551	58	69	1 231	1	1	1	1	= 4	100-165	FM
Maimonides	A Hurwitz	114	3 581	104	45	3 624	5	2	1	1	= 9	75-150	FM
Methodist	A J Vosseler	73	2 541	75	25	4 942	3	2	1	1	= 7	175-200	FP
Montefiore	F S Hurwitt	75	4 512	149	53	1 465	5	2	3	2	= 12	207 282	PM
Mount Sinai	I D Baronofsky	141	3 741	166	50	14 239	11	8	4	3	= 26	100-100	FM
New York	E Glenn	80	1 154	128	67	28 675	10	8	3	11	= 32	164 288	PM
New York Medical College—Metropolitan Medical Center													
Flower and Fifth Avenue	C P Bailey	120	1 265	113	34	850	4	[illegible]	1	1	= 8	125-175	FM
Metropolitan	C Bailey	85	2 617	152	50	25 102	3	3	3	2	= 11	145-195	FM
New York Polyclinic Medical School and Hospital	J F Hammett	86	3 371	72	41	4 257	5	5	5		= 12	150-225	FM
Presbyterian	G H Humphreys	107	2 726	73	61	50 914	10*	8	5	4	= 27	250-417	PM
Queens Hospital Center	L J Moore	160	3 087	301	53	5 173	4	4	2	2	= 12	145-195	
Roosevelt		147	3 956	150	41	6 719	7*	3	3	3	= 16	158 275	PM
St Clare's	J I Madden	145	918	142	39	4 160	2	2	2	2	= 8	125-150	PM
St John's Episcopal	J E Mule	75	3,304‡	64	27	3,735	1	1	1	1	= 4	175-225	FM
St Luke's	H A Zintel	138	3 882	109	62	24 637	8	4	3	3	= 18	125-200	FM
St Vincent's	J M Rousselot	207	6 807	264	50	16 679	6*	6	2	2	= 16	175-250	FM
Veterans Admin (Bronx) [99]	P Cooper	125	2 161	70	47	1 906	7*	4	4	3	= 18	270-462	O
Veterans Admin (Brooklyn)	H H LeVeen	97	1,903	111	59	2 086	9	3	3	3	= 18	271-462	O
Veterans Admin (Manhattan) [94]	W F MacFee	186	2 412	110	50	3 443	6	5	8	7	= 26	271-413	O
Wyckoff Heights													
Rochester													
Genesee	E W Douglas	103	3 994	87	83	4 463	4	2	2	1	= 9	175-375	FM
Highland	T B Garlick	107	1 642	72	67	844	2	2	1	1	= 6	175-375	FP
Rochester General [118]	C O Sahler	118	5,315	97	68	1 250	3*	3	2	2	= 10	175-250	FP
St Mary's	J H Remington					2 050	2	2	2	2	= 8	250-325	PM
Strong Memorial-Rochester Municipal [209]	W J M Scott	82	2 859‡	163	71	12,361	8*	8	3	2	= 21	166-291	O

Numerical and other references are listed on pages 811 through 814

28 SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Affiliations FM PM O
NEW YORK—Continued													
Syracuse													
State University of New York													
Upstate Medical Center	C B Mueller	326	11,427	358	48	7 971	12	8	[illegible]	4	= 29	250-350	0
Veterans Admin	J S Rogers	97	1 [illegible]				5*	3	3	2	= 13	271 412	
Valhalla													
Grasslands	R W Holliday	66	1,328	77	[illegible]	7 [illegible]	2	2	2	2	= 8	175-225	FM
NORTH CAROLINA													
Chapel Hill													
North Carolina Memorial	N A Womack	[illegible]	1 [illegible]	68	7[illegible]	5 371	6	6	4	2	= 18	175-205	0
Durham													
Duke [300]	J D Hart	[illegible]	2,1[illegible]0	52	54	6 902	12	3	3	3	= 21	43 200	FM
Winston Salem													
City Memorial	H M Starling	114	5 214	90	33		1	1	1	0	= 3	315-420	PM
North Carolina Baptist	H H Bradshaw	53	2 397#	50	70	2 701	6	3	3	3	= 15	166-208	PM
OHIO													
Akron													
Akron City	S A Schlueter	130	1 107			1,397	4*	3	3	2	= 12	275-375	FP
Akron General	R T Allison	168	5 065	161	44	4 186	6	3	3	2	= 14	300-400	FM
St Thomas	A F Dorner	91	3 552	48	41	5 376	2	2	2	2	= 8	250-400	FP
Cincinnati													
Christ	J R Meek	158	2,269	70	41	6,2[illegible]	4	1	1	1	= 7	200 275	FM
Good Samaritan [305]	H J Brinker	90	8 430	125	48	900	4	3	3	2	= 12	250-325	FM
Jewish [304]	J Wolfer	112	6 401	85	58	3 187	6	3	3	1	= 13	195 250	FP
University of Cincinnati College of Medicine Hospital Group													
Cincinnati General	W A Altemeier	103	2 243	139	57	16 [illegible]	10	6	4	8	= 28	75-465	FM
Veterans Admin	W Altemeier	81	1 126	57	67	2,116						271 462	0
Cleveland													
Cleveland Clinic	G Crile Jr	26	1 075	62	50	17 476	6	4	2	2	= 14	275-350	
Cleveland Metropolitan General	J A Simeone	65	1 566	65	66	8,168	10	4	4	4	= 22†	150 258	FM
Fairview Park	R J McNamee	65	2,087#	65	21	856	2	2	2	2	= 8	250-400	FP
Huron Road	J J Bilton	112	4 411	131	50	368	3*	2	2	2	= 9	210-250	FP
Lutheran	M M Driver	91	3 74[illegible]	64	51		4	2	2	1	= 9	250-300	FM
Mount Sinai	H Gans	81	3 923	95	42	6,101	4	2	2	2	= 10	215-250	FM
St Alexis	C R Tukeski	137	[illegible]	132	45	1 402	3	3	2	1	= 9	275-300	FMO
St Luke's	F S Cross	121	3 928	153	48	5 790	2	2	2	2	= 8	200-305	FM
St Vincent Charity	D H Shaw	180	6,299	186	48	26 81[illegible]	2	2	2	2	= 8	210 250	FP
University Hospitals of Cleveland	W D Holden	124	4 478	120	69	10 631	10*	5	[illegible]	5	= 25	150 250	PM
Veterans Admin [308]	C J Coghill	78	2 027	61	61	1 018	8	4	2	2	= 16	271-462	PM
Columbus													
Ohio State University Hospitals	R M Zollinger	114	1 [illegible]28	11	82	6 1[illegible]	6	4	4	4	= 18	177 247	PM
University	R Patton	101	5 140#	82	56		3	2	1	1	= 7	290 365	PM
White Cross													
Dayton													
Veterans Admin	R J Breton	168	1 888	116	74	1 72[illegible]	4*	[illegible]	3	3	= 13	271 412	0
Toledo													
Maumee Valley	R Holz	31	9[illegible]5	61	44	[illegible]698	2	2	2	1	= 7	285-350	FP
Youngstown													
St Elizabeth	J K Herald	204	8 36[illegible]	100	68	968	[illegible]	2	2	2	= 11	300-375	FM
Youngstown	G G Nelson	210	9 728	187	42	1 708	4	4	2	2	= 12	275-400	FM
OKLAHOMA													
Oklahoma City													
St Anthony	C M O'Leary	126	6 [illegible]28	127	41	3 997	1	1	1	0	= 3	300 350	FM
University of Oklahoma Medical Center	J V Schilling						6	6	4	4	= 20	200 275	PM
University Hospitals [—]		84	1 [illegible]22	47	72	8,547							
Veterans Admin	C S Campbell	91	1 219	67	74	1 8[illegible]							
OREGON													
Portland													
St Vincent	J M Roberts	101	6 792	81	58	640	2	2	2	2	= 8	275 300	PM
University of Oregon Medical School Hospitals and Clinics [8-1]	J J Dunphy	79	2 030	105	65	7 744	[illegible]	[illegible]	5	5	= 20	165-215	FM
Veterans Admin	W W Kruppacher	71	1 [illegible]	71	82	1 5[illegible]	3	4	3	3	= 1[illegible]	271-412	PM
PENNSYLVANIA													
Abington													
Abington Memorial	C M Smyth	75	[illegible]029	81	15	1 [illegible]33	1	1	1	1	= 4	275 375	FM
Allentown													
Allentown	K J Schaeffer	85	2 711	127	1	6 [illegible]39	1	1	1	1	= 4	225 300	FM
Bryn Mawr													
Bryn Mawr [327]	J R Robbins	10	4 7[illegible]	98	66	3 [illegible]68	2	2	1	1	= 6	200-275	FP
Danville													
George F Geisinger Memorial	J R Babcock	49	1 91[illegible]	63	46	10 287	1	2	3	1	= 7	175 250	FM
Erie													
Hamot	B Goldman	86	4 02[illegible]	71	44	1 [illegible]79	1	1	1	1	= 4	250 300	FM
Harrisburg													
Harrisburg	D A Johnston		5 647	246	22	20 739	4*	1	1	1	= 7	250-	FP
Philadelphia													
Albert Einstein Medical Center													
Northern Division	B Greenspan	103	3 [illegible]87	148	11	1 371	4	3	1	0	= 8	125 200	FM
Southern Division	A Ulin	52	1 677	21	51	2 696	2	2	1	0	= 5	125 200	FM
Germantown Dispensary and Hospital	S D Weeder	149	1 152	164	39	23,195	1	1	1	1	= 4	175-200	FM
Graduate Hospital of the University of Pennsylvania	L K Ferguson	26	1,228	33	67	10,169	2	2	2	2	= 8	75-100	FM
Hahnemann Medical College and Hospital	J M Howard	105	4 700	96	61	10 600	6	6	4	3	= 19	110 185	FM
Hospital of the University of Pennsylvania [171]	J Rhoads	140	3 729	180	68	11 228	9	6	7	7	= 29	165-	O
Hospital of the Women's	D R Cooper	60	1,922	36	39	1 923	1	1	1	1	= 4	125-175	FM
Medical College of Pennsylvania	J H Gibbon, Jr	105	8 003	113	50	5 600	3	3	3	3	= 18	100-150	PM
Jefferson Medical College [131]	G C Lingel	112	4 005	79	70	10 4[illegible]4	2	2	2	2	= 8	200-250	FM
Lankenau [217]	W D O'Sullivan	70	2,097	104	51	5 47[illegible]	1	1	1	1	= 4	250-400	FM
Misericordia	O C King		2 115	89	60	10 397	4	4	4	0	= 12	20-40	FM
Pennsylvania													

Numerical and other references are listed on pages 811 through 814

28 SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main tenance FM PM O
PENNSYLVANIA Philadelphia—Continued													
Philadelphia General	W Fred J Hall	102	2 199	182	48	5 741	3	3	2	2	= 10	128-265	FM
Hahnemann Medical College Service													
Jefferson Medical College Service													
Temple University Service													
University of Pennsylvania Service													
Woman's Medical College of Pennsylvania Service													
Presbyterian	R Glover	71	2 213	77	67	4 654	2	2	2	1	= 7	235 290	FM
Temple University	W F Burnett	177	2 686	110	47	5 558	11	4	4	4	= 23	175 250	PM
Veterans Admin	O Serlin	106	3 669	86	77		5	3	3	3	= 14	270-462	O
Pittsburgh													
Allegheny General	N K Hammond	60	1 880	47	37	3 257	1*	1	1	1	= 4	260 250	FM
Mercy	H C Kuebner	236	4 909	144	42	8 974	2	1	4	2	= 9	235 310	FM
Health Center Hospitals of the University of Pittsburgh School of Medicine													
Children's	W B Kiesewetter		1 184			4 291	0	0	0	5	= 5	175-175	FP
Presbyterian—Woman's	S P Harbison	76	2 357	68	68		4	2	2	2	= 10	125-175	FM
Veterans Admin [34]	F C Jackson	90	1 249	92	74		5*	2	2	2	= 11	270-462	O
Western Pennsylvania	C N Foster	91	2 781#	92	59	1 483	2	1	1	0	= 4	250-300	FP
Sayre													
Robert Packer	W C Beck	63	2 944	55	64	13 760	2*	1	1	1	= 5	235 375	PM
York													
York	F M Weaver	150	8 600	129	54	7 342	1	1	1	1	= 4	225-300	PM
PUERTO RICO													
Caparra Heights													
University	I N Benitez	69	1 818	78	68	4 249	2	3	2	0	= 7	250 350	FM
San Juan													
San Juan City	I N Benitez	70	2 058	76	75	22 953	3	3	3	3	= 12	175-425	FM
RHODE ISLAND													
Providence													
Rhode Island	J M Beardsley	124	5 505	146	47	16 017	4	2	2	4	= 12	125-200	FM
Veterans Admin—See Massachusetts Memorial Hospital Boston													
SOUTH CAROLINA													
Charleston													
Teaching Hospital of the Medical College of South Carolina	F F Kredel	128	4 372	142	63	8 149	4	3	3	4	= 14	138 168	FM
Medical College													
Roper													
Greenville													
Greenville General	I Stonebarner	134	5 555±	148	45	4 017	1	1	1	1	= 4	275-350	O
TENNESSEE													
Memphis													
Baptist Memorial	R M Miles	283	12 306	199	46	3 851	3	2	2	1	= 8	375-400	PM
City of Memphis Hospitals	H Wilson		1,832	106	55	12 568	3	3	3	4	= 13	150 200	FP
Methodist	J M Aste		7 494	98	33		3	3	1	0	= 7	375-400	PM
Veterans Admin	R F Bowers	109	2 964	107	90	1 515	9*	5	4	3	= 21	271 412	PM
Nashville													
Baptist	R C Hammond	136	7 275	84	36	780	6	3	2	1	= 12	300 300	FM
George W Hubbard	M Walker	44	1 017	90	46	7 594	1	2	5	2	= 10	150 225	FM
St Thomas [3]	G Holcomb	117	5 617	77	35		3	3	3	1	= 10	300 300	FP
Vanderbilt University Affiliated Hospitals													
Nashville General	J I Sawyers		2 899	31			3				= 9	325	
Vanderbilt University	H W Scott	63	2 741	67	40	7 956	4	4	3	3	= 15	100 125	FM
Veterans Admin	W C Cobbel Jr	167	2 609	115	60		4	3	3	4	= 14	270-462	O
TEXAS													
Dallas													
Baylor University	J W Duckett	71	3 654	48	50	2 088	3	3	3	0	= 9	210-230	PM
Parkland Memorial	B Wilson	106	3 499	182	40	23 444	10	9	3	5	= 27	150-200	PM
Veterans Admin [363]	J P Norton	95	1 295	90	88	2 760	6	4	2	2	= 14	271 412	PM
Galveston													
University of Texas Medical Branch Hospitals	R M Moore	54	1 481	51	57	6 096	7	5	3	3	= 18	160 160	FP
Houston													
Baylor University College of Medicine Affiliated Hospitals													
Jefferson Davis	M E DeBakey	58	1 744	93	47	15 096	6*	6	6	2	= 20†	125-165	PM
Methodist	L I D Tuttle	70	2 050	68	8	257	1	1	1	1	= 4	100 175	FM
Veterans Admin	C I Jordon	67	1 929	55	93	7 894	8*	4	4	2	= 18	270-412	PM
Hermann	C W Waldron	120	5 958	105	50	6 390	2	2	2	2	= 8	125-200	FM
UTAH													
Salt Lake City													
Dr W H Grove Latter Day Saints	H M Jackson	117	6 449	82	38	2 55	5	2	2	2	= 11	250-350	FP
University of Utah Affiliated Hospital													
Salt Lake County General	W I Burdette	51	1 909	93	71	18 965	4	4	4	4	= 16	230 462	O
Veterans Admin	W K Fitzpatrick	87	1 187	35	83		2	2	2	3	= 9	271-462	O
VERMONT													
Burlington													
University of Vermont Affiliated Hospital													
De Goesbriand Memorial	A A Chadstone	50	999±	38	61	2 765						205 208	
Mary Fletcher	A C Mackay	69	2 710	45	64	3 283	2	2	2	2	= 8	100-166	FMO
VIRGINIA													
Charlottesville													
University of Virginia	W H Muller Jr	73	2 271			22 364	7	4	3	4	= 18	75-150	FM
Norfolk													
De Paul	C J Devine Jr	161	4 609	9	58	5 676	2	1	1	1	= 5	225-300	FM
Norfolk General	R J Payne	156	5 471	112	39	10 785	4	2	1	1	= 8	215-315	FM
Richmond													
Medical College of Virginia—Hospital Division	D M Hume	146	4 229	219	2	12 390	7	8	5	3	= 23	100-17	FM
Veterans Admin	C W Byrd	112	1,34	45	67	1 775	2	2	2	2	= 8	271 412	PM

Numerical and other references are listed on pages 811 through 814

28 SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Meets FM PM O
WASHINGTON													
Seattle													
Swedish	E B Spair	169	10 172	114	51		4	3	2	1	= 10	225-388	FP
University of Washington Affiliated Hospitals	H N Harkins												
King County Hospital Unit No 1 (Harborview)		60	1 511#	107	72	9,203	9*	7	6	6	= 28	150-400	FM
University			98#	11	63	170	8	7	6	6	= 27	180-455	PM
Veterans Admin		110	1 163	44	82	793	3	3	3	2	= 11†	271-462	
Virginia Mason 378	J W Baker	99	5 407	87	81		3	3	3	3	= 12	195-375	FP
WEST VIRGINIA													
Beckley													
Beckley Memorial	R F Wilcox	82	3 031	38	63	17,800	3	3	3	3	= 12	300-450	FP
Charleston													
Charleston General	V Skaff	121	6 131	80	46	10 095	2	2	2	2	= 8	225-275	FP
Memorial	J F Jutz	114	5,851	68	56	3 521	2	2	1	1	= 6	250-300	FP
Huntington													
Chesapeake and Ohio Railway Employees Affiliated Hospitals													
Chesapeake and Ohio 373 (Clifton Forge, Va)	J M Fimmett	92	1 664	43	35	14,218	4	3	2	1	= 10	200-300	FM
Chesapeake and Ohio	J P Carey	52	1 763	36	61	7 824	1	1	0	1	= 3	200-250	FM
WISCONSIN													
Madison													
University Hospitals	F R Schmidt	124	3 071	130	84	13,129	10*	5	4	4	= 23	100-250	FM
Milwaukee													
Milwaukee County	J H Ellison	160	4 620	336	67	46 596	6	5	4	4	= 19	290-434	
Milwaukee 387	C S Rife		4 206	37	65		2	2	1	0	= 5	281 357	PM
Veterans Admin (Wood)	F H Ellison, M B Smith	118	2 644	112	90	4 608	4	4	3	3	= 14	271-412	PM

Residency programs in the following hospitals have been approved by the Council, the American Board of Surgery and the American College of Surgeons, through the Conference Committee on Graduate Training in Surgery, for THREE years of training, designed to qualify the trainee for examination by the American Board of Surgery as a Group II candidate

Hospitals 183, Residencies, 994

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Meets FM PM O
UNITED STATES ARMY													
WASHINGTON													
Madigan General **Tacoma**	W A Todd Jr	227	4 406	24	83	37,324	2	2	2	0	= 6		
UNITED STATES PUBLIC HEALTH SERVICE													
LOUISIANA													
U S Public Health Service **New Orleans**	J I Elliott	132	2 643	19	68	7 826	2	2	2	0	= 6		
MARYLAND													
U S Public Health Service **Baltimore**	H D Fishburn	138	2 900	72	81	13 686	2	2	2	0	= 6		
MASSACHUSETTS													
U S Public Health Service **Boston**	E W Love	116	2 048	18	88	9,923	1	1	1	0	= 3		
NEW YORK													
U S Public Health Service, **New York City (Stapleton)**	P F Walker	279	4 832	39	88	24 305	5*	4	4	0	= 13		
WASHINGTON													
U S Public Health Service **Seattle**	J D Lane Jr	116	1 963	38	83	10 698	1	1	2	0	= 4		
OTHER FEDERAL													
CANAL ZONE													
Balboa Heights													
Gorgas	F P Shirokov	90	2 550	29	76	13,463	2	3	2	0	= 7	415-93	0
NONFEDERAL AND VETERANS ADMINISTRATION													
ALABAMA													
Birmingham													
Carraway Methodist	B M Carraway	99	5 304	38	37		3*	2	2	0	= 7	250-300	FM
Tuskegee													
Veterans Admin	J F Hume	142	1 287	62	63	757	3	3	2	0	= 8	271 467	0
ARIZONA													
Phoenix													
St Joseph's	J J Berens	81	7 361	181	50	963	1	1	1	0	= 3	250-350	FP
CALIFORNIA													
Bakersfield													
Kern County General	G Paulsen	66	1 966	136	95	20 150	4	4	2	1	= 11	300-425	0
Los Angeles													
California	J M Harris	117	6 027	65	51	1 806	2	2	2	0	= 6	225-275	FP
Hospital of the Good Samaritan	C J Berne	213	8,163	145	43	2 421	2	2	2	0	= 6	325-350	FM
Queen of Angels	J Regan	153	6 115	107	55	980	2	1	1	0	= 4	275-375	FM
St Vincent's	L C Bennett	99	4 003±	55	69	132	1	1	1	0	= 3	350-400	FM
San Diego													
Mercy	T E O Connell	129	7,227	89	70	1,687	1	1	1	0	= 3	225-375	FP
San Francisco													
St Joseph's	H H Lindner	52	2 582	22	40	677	1	1	1	0	= 3	250-400	FM
St Luke's	O H Pflueger	66	4 802	91	65	7 235	3*	1	1	0	= 5	325-375	FP
St Mary's	T J Whalen	109	4,160	49	88	2 646	3*	2	1	0	= 6	200-300	FI
COLORADO													
Denver													
Mercy	B Grossman	106	4 731	61	62	1 492	2	1	1	0	= 4	300-350	PM

Numerical and other references are listed on pages 811 through 814

28 SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961-1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Affiliation FM PM O
COLORADO Denver—Continued													
Presbyterian [110]	K C Sawyer	87	3 898	30	67	1 448	1	1	1	0	= 3	270-300	PM
St Luke's [111]	C F Wolfgast	72	2 906	110	69	5,866	3	3	1	0	= 7	220-240	PM
Pueblo													
Colorado State [112]	H H Kerr	118	470	60	60	3 410	6	1	1	0	= 8	270-320	FM
CONNECTICUT													
New Haven													
Hospital of St Raphael	O Pelliccia	75	3 748	120	42	2 460	4	4	2	1	= 11	300-320	PM
Waterbury													
St Mary's	J F Burke	116	6 840	97	53	6 390	2	2	1	0	= 5	220-270	FP
DISTRICT OF COLUMBIA													
Washington													
Doctors	C S White	130	5 760	83	61		2	1	1	0	= 4	200-300	FM
FLORIDA													
Miami Beach													
Mount Sinai Hospital of Greater Miami	R Fleming	95	4 070	90	42	2 271	4	2	1	0	= 7	250-300	FM
Orlando													
Orange Memorial	A H Spivack	88	3 832	135	49		1	1	1	1	= 4	325-400	O
Tampa													
Tampa General	W M Myers		2 970	78	30	1 887	3*	2	2	0	= 7	250-300	FM
GEORGIA													
Atlanta													
Crawford W Long Memorial	C F Holloway	156	9 749	99	28	5 666	6	2	2	0	= 10	285-300	O
Macon													
Macon	C H Richardson Jr	66	3 161	89	24	5 962	3*	2	2	0	= 7	275-375	FP
Savannah													
Memorial Hospital of Chatham County	J C Zirkle	52	2 968	80	54	3 768	1	1	1	0	= 3	350	FM
ILLINOIS													
Chicago													
American	M Thorek	21	1 791	43	40	20,873	2	2	2	0	= 6	65-140	FM
Augustana	J B Jacobs	126	9 700	79	58		2	2	2	0	= 6	200-300	FM
Grant	C K Solander	51	3 052	52	48	3 892	1	1	1	0	= 3	225-275	FM
Illinois Masonic	J W Peterson	107	4 070	107	93	21 873	4	0	2	0	= 7	175-235	
Lutheran Deaconess	J D Koucky	69	2 790	10	44		1	1	1	0	= 3	200-200	FM
Provident	C W Phillips	41	1,[illegible]	34	55	706	1	1	1	0	= 3	200-200	FM
St Elizabeth	A F Cipolla	101	5 067	38	52	1 027	1	1	1	0	= 3	200-250	FM
St Joseph	F J Chereck	73	2 437	29	58	350	1	1	1	0	= 3	300-350	FM
St Mary of Nazareth	F H Warszewski	71	2 809	56	29		4	2	2	0	= 8	225-275	FP
Peoria													
St Francis	C D Branch	124	4 382	21	1	12	1	1	1	0	= 3	225-275	FM
INDIANA													
Bluffton													
Clinic	H D Taylor	40	600	16	81	10 759	1	1	1	1	= 4	300-400	PM
Indianapolis													
Methodist	D S Mesenhardt	140	4 979	117	58	971	2	2	2	0	= 6	290-350	PM
St Vincent's	J Finneran	101	4 857	82	35	409	3*	1	1	0	= 5	275-425	PM
Lafayette													
St Elizabeth	R I Cery	100	3 600#	98	30	99	2	2	2	0	= 6	275-350	FM
KANSAS													
Kansas City													
St Margaret's	M V Laing	18	8 132	47	41	8 884	1	1	1	0	= 3	300-400	PM
KENTUCKY													
Harlan													
Harlan Memorial	W Potter	40	[illegible]	[illegible]	52	8 000	3	3	3	0	= 9	400-500	FP
LOUISIANA													
New Orleans													
Southern Baptist	S C Lyon	174	7 [illegible]	85	42		3	2	1	0	= 6	225-250	PM
Touro Infirmary	S Karlin		3 924	100		4 [illegible]	2	2	2	0	= 6	125-175	FP
MARYLAND													
Baltimore													
Lutheran	W F Gilmore	[illegible]	1 [illegible]		35	2,[illegible]9	4	2	1	0	= 7	220-250	FM
Provident	R Montgomery	47	1 711	5	48	3 791	4	2	1	0	= 7	225-250	FM
St Agnes	C Goyatos	77	2 703#	70	1	11 860	5*	2	1	0	= 6	275-300	FM
MASSACHUSETTS													
Beverly													
Beverly	R F Alt	72	2 967	39	72	11 829	2	2	1	0	= 5	200-300	FM
Fall River													
Truesdale-Fall River General													
Fall River General	D F Callery		597			2 6[illegible]	1	0	0	0	= 1	300-300	FP
Truesdale	C H Hawes	58	2 327	49	35	3 727	1	1	1	0	= 3	175-300	FM
Malden													
Malden	W E Carrey	122	6 160	76	44		4*	1	1	0	= 6	200-375	FM
Newton Lower Falls													
Newton-Wellesley [102]	H C Dunphy	83	4 420	69	41	837	1	1	1	0	= 3	200-270	FM
MICHIGAN													
Battle Creek													
Leila Y Post Montgomery	R Mustard	51	2 824	31	32	861	1	1	1	0	= 3	400-525	FM
Detroit													
Alexander Blain	A Blain III	27	1 032	8	8	8,024	2	1	1	0	= 4	250-350	FM
Providence	W G Quigley	145	5 764	95	41	1 013	2	1	1	1	= 5	410-450	PM
St Joseph Mercy	S J Shanoski	68	3 468	86	41	450	1	1	2	0	= 4	410-450	FM
Grand Rapids													
St Mary's	F S Gillett	83	3 144	71	34	424	1	2	1	1	= 5	320-350	FP

Numerical and other references are listed on pages 811 through 814

28 SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Emphasis FM PM 0
MICHIGAN—Continued													
Kalamazoo													
Bronson Methidist	C M Hanson	123	4 983	89	61	783	1	1	1	1 =	4	300-360	PM
Pontiac													
Pontiac General	L C Sheffield	105	5,053	99	60	470	2	2	2	2 =	8	350-450	FP
St Joseph Mercy	C Darling	118	3,614	87	54	490	2	2	2	0 =	6	370-430	
Royal Oak													
William Beaumont	H B Barker	95	5 089	56	54	26	3	3	3	0 =	9	300-400	PM
Saginaw													
Saginaw General	J F Manning	75	3,059	47	47	344	1	1	1	1 =	4†	350-440	PM
MINNESOTA													
Minneapolis													
St Barnabas-Swedish													
St Barnabas	J J Hay	74	4,494	17	82		1	1	1	0 =	3	200-300	FM
Swedish	A M Sborov						4	2	1	0 =	7	200-300	FM
St Paul													
Charles T Miller	V D F Smith	103	3,446#	101	57	4,057	1	1	1	0 =	3	325-375	PM
MISSISSIPPI													
Vicksburg													
Mercy-Street Memorial [2]	G H Martin	39	2,469	37	41	2,206	1	1	1	0 =	3	250-300	FM
MISSOURI													
Kansas City													
Menorah Medical Center	A Adelman	87	4,109	40	55	23 320	3	1	1	0 =	5	300-400	FP
St Luke's [226]	A D Mitchell	104	4 944	59	63	4 755	2	2	2	0 =	6	250-300	FP
St Mary's	M J Rumold	52	2,055	57	56	2 862	1	1	1	0 =	3	275-450	PM
St Louis													
De Paul	J W Thompson	127	5,235	93	44		3	2	1	0 =	6	200-250	FM
Missouri Baptist	A R Dalton	57	2,345	81	30	2 090	4	3	1	0 =	8	250-350	FM
Missouri Pacific	R A Weir	105	3 786	64	56	31 185	6*	2	2	2 =	12	200-250	FM
St John's	J G Leahy	138	4,979#	93	53	3 094	3	2	1	0 =	6	250-350	FP
NEBRASKA													
Lincoln													
Veterans Admin	R F Moore	54	888	36	76	1,225	2	2	2	0 =	6	241-347	0
NEW JERSEY													
Atlantic City													
Atlantic City	J H Mason, III	98	4 533	102	56	24,600	2	1	1	0 =	4	200-300	FM
Camden													
Cooper	J R Ristine		2,796	89	46	5 851	1	1	1	0 =	3	200-250	FM
West Jersey	K L Athey	107	4,298	54	69	2,273	1	1	1	0 =	3	225-500	FM
East Orange													
Veterans Admin	A H Levy	175	2 489	110	64	1,950	3	3	2	2 =	10	240-462	
Hackensack													
Hackensack	R B Grant	89	4,122	61	39	3 300	4*	0	0	0 =	4†	150-700	FM
Long Branch													
Monmouth Medical Center	O R Holters	114	3 613	82	49	489	1	1	1	0 =	3	200-700	FM
Mount Holly													
Burlington County	L B Reagan	38	1 921	70	55	4,351	2	2	1	0 =	5	100-300	FM
Newark													
Harrison S Martland Medical Center	C MacArthur	68	1,345	115	35		3	3	3	0 =	9	160-212	FM
St Barnabas Medical Center	H A Schulte	72	2 803	33	24	4 205	1	1	1	1 =	4	150-225	FM
New Brunswick													
Middlesex General	P Kunderman, N Rosenberg	93	4 771	56	64	3,534	2	1	1	0 =	4	225-275	FM
St Peter's General	F Clarke	98	1,807	34	42	666	2	2	1	0 =	5	200-250	FM
Trenton													
St Francis	G V J Sommer Jr	122	5,367	102	40	3 334	2	2	1	0 =	5	210-210	FM
NEW YORK													
Albany													
St Peter's	F L Tyrrell	148	5 449	55	62	9,199	2	2	1	0 =	5	225-250	FM
Buffalo													
Deaconess	E T McGroder	63	3 057	44	21	4 108	4	1	1	0 =	6	300-350	FM
Clifton Springs													
Clifton Springs Sanitarium and Clinic	R M Price	29	808	16	44	11,102	1	1	1	0 =	3	150-250	FM
Johnson City													
Charles S Wilson Memorial	D D Smith	90	3,435	55	51	16 084	2	2	2	0 =	6	225-300	PM
Manhasset													
North Shore	J H Eckel	63	3,245#	37	47	964						200-250	FP
Mount Vernon													
Mount Vernon	J F Bagg	93	3 160	77	40	2,425	1	1	1	0 =	3	200-200	FM
New Rochelle													
New Rochelle	H J Dunlap	157	7 970	70	34	4 303	1	1	1	1 =	4	225-375	FM
New York City													
City Hospital at Elmhurst	A Zimany	125	1,943	213	54	5 469	2	2	2	0 =	6†	145-195	
Cumberland	J J Gainey	93	2,529	112	31	4,901	4	2	2	0 =	8	145-195	
Fordham	B H Golden	112	2,864	171	51	18 277	2	2	2	0 =	6	145-195	FM
French	H B Keyes	63	2,222	57	42	6 085	2	1	1	1 =	5	120-145	FM
Grand Central	L Breidenback	97	3,835#	87	40	784	3	3	1	0 =	7	125-165	FM
Greenpoint	S Schussheim	51	1,404	61	36	9 559	2	2	2	0 =	6	145-195	FM
Jamaica	E J Patterson						1	1	1	1 =	4	200	FM
Lutheran Medical Center	R P San Filippo	94	2,292	60	28	2 094	2	0	1	0 =	3	135-185	FM
Mary Immaculate	N D Tiscione		1,492#	47	39	864	2	2	1	0 =	5	170-210	FM
Misericordia	M J Healy	71	1,862	117	39	2,246	4	0	0	0 =	4	150-175	FM
Morrisania City	M Eisenstat	41	1,462	57	33	5 820	1	4	2	0 =	7	145-195	FM
St Catherine's	J A McCabe	62	2 664	60	28	2,523	1	1	1	1 =	4	125-150	FM
St Mary's	J Rizzo	51	1 392	37	30	2,339	1	1	1	0 =	3	200-250	FM
Sydenham	S Standard	48	2 052	26	30	7,563	2	1	1	0 =	4	145-195	
Schenectady													
Ellis	S MacMillan	111	4,197	115	57	531	3*	3	1	0 =	7	325-400	FP
White Plains													
White Plains	W M Sheridan	97	3 749#	83	56	3 856	1	1	1	0 =	3	175-200	FP

Numerical and other references are listed on pages 811 through 814

28 SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend per Month: Min Max	Maintenance FM PM O
NORTH CAROLINA													
Charlotte													
Charlotte Memorial	A G Brenizer	3	2 249#	43	58	10 140	1	1	1	0	= 3	29-34	PM
Durham													
Lincoln	H M Schiebel	17	604	17	26	4 343	1	1	2	0	= 4	22-27	FM
Watts	J F Davis	91	4 27	36	39	2 484	2	2	1	0	=	300 3 0	FM
Winston Salem													
Kate Bitting Reynolds Memorial	J M Walker	(119	2 43	8	96	7 181	1	1	1	0	= 3	31-470	PM
OHIO													
Canton													
Aultman	W M Dowlin	13	6 81	113	43	997	5	2	3	1	= 12	27-400	PM
Mercy	P F Smith	13	6 31	171	2	311	4	2	2	0	= 8	27-300	PM
Cincinnati													
St Mary s	R A Matuska	74	2 864	4	28	2 912	1	1	1	0	= 3	27-3 0	FM
Cleveland													
Evangelical Deacone s	J H Lazzari	49	2 28#	2	4		3	3	1	0	= 7	17-22	FM
St Johns	J C Avellone	101	4 929	89	17	10	4	2	1	0	= 7	22-300	FM
Columbus													
Mount Carmel	W H Teachnor	120	4 670	78	51	397	1	1	1	0	= 3	27-32	FP
Dayton													
Good Samaritan	C E O Brien	124	7 490	72	38		1	1	1	0	= 3	2 0 27	FM
Miami Valley	T Shively Jr	209	6 745#	96	51	2 139	2	2	2	0	= 6	225 2 0	FP
St Elizabeth	J P Rab	74	3 5 0	3	49	7 72	1	0	0	0	= 1	27-300	PM
Garfield Heights													
Marymount	W F Mishler	94	3 596	46	22	167	2	2	2	0	= 6	2 0 300	FM
Lakewood													
Lakewood	N W Thiessen	102	3 129	56	41	209	4	3	1	0	= 8	200 220	FP
Lima													
Lima Memorial	R R Snowball	80	4 042#	33	39	180	1	1	1	0	= 3	300 3 0	FM
St Rita s	C H Leech	87	3 92	91	4	4 160	1	1	1	1	= 4	400 4 0	PM
Toledo													
Mercy	H I Hauman	112	5 676	117	43	812	1	1	1	0	= 3	27-32	FM
St Vincent s	B C Shaffer	118	5 660#	110	58	9	1	1	0	0	= 2	27-27	FP
Warren													
Trumbull Memorial	D A Miller	122	4 076	104	49		2	2	2	0	= 6	300-400	FP
OKLAHOMA													
Tulsa													
Hillcrest Medical Center	C T Thompson	49	2 19	24	2	837	3	2	2	0	= 7	200-300	FM
St John s	W C Pratt	112	4 010	92	31	3 19	1	1	1	1	= 4	17-2 0	FP
OREGON													
Portland													
Good Samaritan	M Mckirdie		1 079#	37	60	2 782	3	0	0	0	= 3	27-27	PM
PENNSYLVANIA													
Allentown													
Sacred Heart	C A Holland	140	4 939	132	48	2 840	1	1	1	0	= 3	22-27	FP
Bethlehem													
St Luke s	D P Walker		5 113	161	47	1 602	2	1	1	0	= 4	22-300	FP
Easton													
Easton	J C Zullick Jr	86	2 16	46	65	1 283	1	1	1	0	= 3	2 0-2 0	FP
Erie													
St Vincent	P C Mainzer	11	4 981	104	45	2 48	1	1	1	0	= 3	27-32	FM
Harrisburg													
Harrisburg Polyclinic	W K McBride	188	5 400	115	47	4 014	2	1	1	1	= 5	2 0 37	FM
Norristown													
Sacred Heart	R A Buyers	93	5 112	70	38	19 283	1	1	1	0	= 3	3 0 3 0	FM
Philadelphia													
Episcopal	J W Klopp	77	2 38	93	30	7 111	2	2	2	0	= 6	1 0-1 0	FM
Frankford	O P Large	59	2 777	39	44	10 000	1	1	1	0	= 3	275-32	FP
Mercy Douglass	M W Allen	48	1 641	28	18	1 299	3	2	1	0	= 6	200-2 0	FM
Methodist Episcopal	C Willauer	75	2 49	60	27	1 299	2	1	1	0	= 4	1 0 2 0	FM
Nazareth	J F O Neill	70	2 487	69	46	110	1	1	1	0	= 3	200-300	FM
Pittsburgh													
Montefiore	S A Rosenburg	90	3 78	97	4	5 9	3	1	1	0	=	22-27	FM
St Francis General Hospital and Rehabilitation Institute	H F Feather	107	10 633	67	39	4 612	3	3	1	0	= 7	240 30	FP
Reading													
St Joseph s	J R Impink	58	1 762	6	72	1 917	1	1	1	0	= 3	2 0 2 0	FM
West Reading													
Reading	C B Rentschler		2 109	53	68	884	2	2	1	0	= 5	22-300	FM
Williamsport													
Williamsport	F L Sanford	113	4 002	12		17 0	1	1	1	0	= 3	2 0 32	FP
PUERTO RICO													
Ponce													
Hospital de Damas	J F Sala	9	2 40	36	52	3 499	1	1	1	0	= 3	22-2 0	FM
Ponce District General	J C Bonet	102	2 82	110	65	13 739	2	2	2	0	= 6	2 0-3 0	FM
San Juan													
Veterans Administration (San Patricio) [343]	J A Pasalacqua	91	2 090	26	89	2 0 3	3	2	2	0	= 7	318 408	O
SOUTH CAROLINA													
Columbia													
Columbia Hospital of Richland County	C I McCutchen	112	4 68	132	30		1	1	1	0	= 3	200-31	FP
Spartanburg													
Spartanburg General	J V Jeffords	167	6 933	12	36	14 070	3	2	1	0	= 6	37-475	PM
SOUTH DAKOTA													
Yankton													
Sacred Heart	C B McVay	56	706#	36	28	340	1	1	1	0	= 3		
TENNESSEE													
Chattanooga													
Baroness Erlanger	C Young	101	6 710	168	33	931	8	4	2	0	= 14	32-375	FM

Numerical and other references are listed on pages 811 through 814

28 SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Affiliation
TENNESSEE—Continued													
Knoxville													
University of Tennessee Memorial Research Center and Hospital [118]	C Zukle	63	2 470	88	55	6 223	1	1	1	0 =	3	390 340	FM
Memphis													
St Joseph [2 3]	W Grant Jr	121	5 021	100	43	1 893	1	1	0	0 =	2	325 350	FM
TEXAS													
Austin													
Brackenridge	R K Ross	47	2 207	18	50	2 572	3	2	1	0 =	6	250-350	FM
Dallas													
Methodist	B Park	335	8 347	67	39	2 414	2	2	2	0 =	6	225 250	FP
St Paul	D O Wolter	120	5 275	67	58	1 204	2	2	2	0 =	6	225 275	FP
Houston													
St Joseph's	J P Barnes	120		32		724	2	2	1	0 =	5	220-250	PM
San Antonio													
Robert B Green Memorial	A W Hartman	60	2 150	114	18	22 002		3	3	0 =	9	150 300	FM
Temple													
Scott and White Memorial	J Speed	96	3 350	104	52		3	3	3	0 =	9	300 300	0
VIRGINIA													
Alexandria													
Alexandria	C J Lafer	35	1 793#	56	46	2 700	1	1	1	0 =	3	250 350	FM
Richmond													
Johnston Willis	J S Johns	87	3 202#	25	41		1	1	1	0 =	3	250 350	FM
Roanoke													
Jefferson	C Bray	25	982	23	61	3 211	2	1	1	0 =	4	300	FM
Roanoke Memorial	J J George	164	6 291	58	51	2 511	1	1	1	0 =	3	350-350	FP
WEST VIRGINIA													
Beckley													
Beckley	H F Cooper	14	1 972	22	50	18 727	2	1	1	0 =	4	250	FP
Charleston													
Kanawha Valley Memorial	J C Condry	40	1 356	4	2	5 51	1	1	1	0 =	3	200 250	FM
Huntington													
Cabell Huntington	W Bray	77	3 687	18	55		3	2	1	0 =	6	250 300	FM
St Mary's	J J Coffey		6 77	11	31	5 101	1	1	2	0 =	4	275 325	FP
Martinsburg													
Veterans Administration	J Harrison	119	1 851	68	45	406	4	0	1	0 =	5	271 467	0
Philippi													
Broaddus	R C Myer	35	1 605	39	60	13 225	1	1	1	0 =	3	250 350	PM
Wheeling													
Ohio Valley General	J O Rankin		1 531	100	39	2 415	3	2	1	0 =	6	300 350	PM
WISCONSIN													
Madison													
Madison General	S J Chase	62	3 278	65	50		2	2	2	0 =	6	200 250	FM
Milwaukee													
Columbia [151]	M Schroeder	68	2 418#	75	72		1	1	1	0 =	3	250 320	PM
Mount Sinai	S K Wynn	13	4 794	62	32	641	2	2	2	0 =	6	300-375	FM
St Joseph's	J J Cranshaw	140	5 919	139	45	2 766	2	2	2	0 =	6	00 50	PM

Residency programs in the following hospitals have been approved by the Council, the American Board of Surgery and the American College of Surgeons, through the Conference Committee on Graduate Training in Surgery for one year of training as an integral part of an approved program of four or more years duration

Hospitals, 18, Residencies 93

NONFEDERAL AND VETERANS ADMINISTRATION

CALIFORNIA													
Oakland													
Samuel Merritt	S Etheridge R Crosby	40	1 728#	25	61	1 642						200 250	0
San Francisco													
French	W J Rogers	9	3 164	76	43	9 801		0	0	1 =	4	250 300	FM
ILLINOIS													
Chicago													
Henrotin [1]	C B Preston	50	1 117	18	44	6 021	1	0	0	0 =	1		
IOWA													
Des Moines													
Broadlawns Polk County	H J Wichern	1 20	1 306	68	35	1 641	0	0	1	1 =	2	250 250	FM
KANSAS													
Wichita													
Veterans Administration	V H Hinshaw	109	1 594	71	70		2	1	0	1 =	4	251 412	
LOUISIANA													
Lafayette													
Lafayette Charity	J D Rives	75	2 401	71	12	2 756	0	0	0	3 =	3	400 100	FM
MASSACHUSETTS													
Boston													
Lahey Clinic	R B Cattell	88	2 724	71	18	11 813	0	0	0	8 =	8	200	0
Cambridge													
Mount Auburn	J Fartukoff	161	830	84	60		0	1	0	0 =	1	225-225	FM
Chelsea													
Lawrence J Quirk Memorial [99]	A J Davis		1 017	31	52							61 75	
MISSOURI													
Columbia													
Ellis Fischel State Cancer	J J Schwerdt	70	1 200	65	55	8 000	0	0	0	2 =	2	200-300	FM

Numerical and other references are listed on pages 811 through 814

28 SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	FM Main FM PM O
NEW YORK													
New York City													
Francis Delafield Memorial Center for Cancer and Allied Diseases James Ewing Memorial	C H Humphreys II	71	871	171	53	5 591	8	0	0	3	= 11	145 195	
	H I Randall	303	7 720	4 8	40		0	0	26	23	= 49	250-400	FM
NORTH CAROLINA													
Durham													
Veteran Administration	R W Postlethwait	52	1 066#	49	67		0	0	0	1	= 7	270 462	O
OHIO													
Barberton													
Barberton Citizens	P Lukats	110	516	92	43	593							
Cincinnati													
Children s	W A Altemeier												
Columbus													
Children s	H W Clatworthy Jr	49	2 307	54	90	1 020	0	0	0	4	= 44	330 3.0	PM
VIRGINIA													
Lynchburg													
Lynchburg General	F I Owen	36	1 770#	39	30						= 1	200 300	

Residency programs in the following hospitals have been approved by the Council the American Board of Surgery, and the American College of Surgeons through the Conference Committee on Graduate Training in Surgery for additional training following the completion of an approved residency The American Board of Surgery will give credit for time spent in these services toward fulfillment of the practice requirements for Group II candidates

Hospitals 21 Residencies 134

NONFEDERAL AND VETERANS ADMINISTRATION

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	FM Main FM PM O
CALIFORNIA													
Duarte													
City of Hope Medical Center	R J Byron Jr	28	929	98	70	8 833	0	0	2	2	= 4	325 400	O
COLORADO													
Denver													
Children s	D R Akers	30	1 421	19	95	500	1	2	0	0	= 3	200-225	PM
DISTRICT OF COLUMBIA													
Washington													
Children s	F McNamara	18	1 371#	8	88	6 222							FM
ILLINOIS													
Chicago													
Children s	W I Potts		3 419	60	87	4 203	4*	0	0	0	= 4	100-150	FM
MASSACHUSETTS													
Boston													
Children s Hospital Medical Center	R F Gross	52	2 186	106	79	14 344	6	3	2	1	= 12	2[illegible]83	FM
Walpole													
Pondville	W B Patterson	89	1 548	204	65	16 314	0	0	0	4	= 4	300-527	O
Westfield													
Westfield State Sanatorium	F S Hopkins	45	719	93	67	7 738	0	0	0	2	= 2	27 527	PM
MISSOURI													
Columbia													
Ellis Fischel State Cancer	F I Schewe	70	1 700	65	55	8 000	0	0	0	2	= 2	200 300	FM
NEW YORK													
Buffalo													
Children s	J J Leahy	68	2 684	29	82	19 000	0	0	4	0	= 4	175 175	FM
Roswell Park Memorial Institute	C F Moore	78	839	105	100	20 432	0	0	0	12	= 12	334 381	O
New York City													
Francis Delafield Memorial Center for Cancer and Allied Diseases James Ewing Memorial	C H Humphreys II	74	871	171	53	5,591	8	0	0	3	= 11	145 195	
	H I Randall	303	7 720	4 8	40	60 374	0	0	26	23	= 49	250-400	FM
Presbyterian (Babies)	I V Santulli	35	924	24	88	5 220	0	0	0	1	= 1	308-308	PM
OHIO													
Columbus													
Children s	H W Clatworthy Jr	49	2 307	54	90	10 020	0	0	0	4	= 4	300-350	PM
PENNSYLVANIA													
Philadelphia													
Children s	C F Koop	30	2 433	26	80	2,962	2	2	0	2	= 6	66 100	FM
Pittsburgh													
Children's	W B Kiesewetter		1 184			4 291	0	0	0	5	= 5	175 175	FP
PUERTO RICO													
San Juan													
Dr I Gonzalez Martinez Oncologic	I A Vallecillo	87	700	7	100	4 026	0	0	0	2	= 2	300-300	FP
TEXAS													
Houston													
Texas Children s	L W Able	23	1,335	61	92	191	0	0	0	1	= 1	175-175	FM
University of Texas M D Anderson Hospital & Tumor Institute	F C White	90	2 374	103	68	22 756	0	0	0	8	= 8	200-416	O
WASHINGTON													
Seattle													
Children s Orthopedic	D Hall	42	2,614#	47	97	2 635	0	1	1	1	= 3	230-230	

Numerical and other references are listed on pages 811 through 814

28 SURGERY—Continued

Residency programs in the following hospitals are approved by the Council as offering satisfactory training of ONE or TWO years' duration in preparation for residency training in the surgical specialties only Applicants intending to qualify for examination by the American Board of Surgery should refer to the lists of approved services on pages 774 through 781 (Surgical Residencies, J A M A 156-432, Sept 25, 1954)

Hospitals 126, Residencies, 351

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Matching FM PM O
UNITED STATES AIR FORCE													
TEXAS													
U S Air Force, Wichita Falls	H I Woosley Jr	77	3 030	2	100	61,949	0	0	2	0	= 2		
UNITED STATES ARMY													
GEORGIA													
Martin Army Fort Benning	R M Hardaway	91	1 980	13	100	17,068	6	0	0	0	= 6	600-710	0
KENTUCKY													
U S Army Fort Campbell	C Hoffman Jr	15	1,538	4	50	6 505	3	0	0	0	= 3	476-625	0
NORTH CAROLINA													
Womack Army Fort Bragg	H V Conrad	173	4 608	11	100	17,295	6	0	0	0	= 6		
TEXAS													
U S Army Fort Hood													
VIRGINIA													
Dewitt Army Fort Belvoir	D G Lisner	81	1 752	6	83	23 688	6*	0	0	0	= 6		
NONFEDERAL AND VETERANS ADMINISTRATION													
ARIZONA													
Phoenix													
Good Samaritan	J B Smith	81	15	101	47	851	4	0	0	0	= 4	300-350	PM
Tucson													
St Mary's	R J Magee	60		16	14	4 965	8	0	0	0	= 8	200-	PM
Tucson Medical Center—Pima County General													
Pima County General	J G Ramsey	14	374	28	54	1 217	3	1	0	0	= 4	200-300	FP
Tucson Medical Center	D W Neubauer	31	4 008	21	25	463	4	0	0	0	= 4	200-300	PM
ARKANSAS													
Little Rock													
Arkansas Baptist	W G Cooper Jr	142	8 937	113	34	535	2	0	0	0	= 2	325-375	PM
CALIFORNIA													
Arlington													
General Hospital of Riverside County	G J Anday	24	763	62	68	1,582	3	0	0	0	= 3		PM
Berkeley													
Herrick Memorial	G B Lewis	52	2,653	24	59	1 233	1*	1	0	0	= 2	100	FP
Long Beach													
Memorial Hospital of Long Beach	P F Volkt	119	6 020	186	31	629	3	0	0	0	= 3	225-275	PM
Los Angeles													
Santa Fe Coast Lines	J Chaffin		796	2			3	0	0	0	= 3	400-	PM
Pasadena													
Collis P and Howard Huntington Memorial	M Grumme	45	2 233	18	56	2 761	3	0	0	0	= 3		
San Bernardino													
San Bernardino County Charity	R Seavers	25	937	62	55	21 203	4	1	0	0	= 5	350-400	PM
San Francisco													
Mary's Help	P Carlson	60	2,456#	21	57	1 806	2	1	0	0	= 3	295-325	
Santa Monica													
St John's	J P Roberts	100	5,718	42	40		1	0	0	0	= 1	225-250	PM
COLORADO													
Pueblo													
St Mary Corwin	K B Capek	128	6,548	68	13	310	4	2	1	0	= 7	285-300	PM
CONNECTICUT													
Danbury													
Danbury	V A Machdinski						2	0	0	0	= 2	200-200	FM
Greenwich													
Greenwich	J A Read	91	4 053	82	73	1,547	1*	0	0	0	= 1	300-300	FM
Hartford													
Hartford Municipal Hospital and Health Center	C C Kelly	14	1 965	17	15	10 461	2	0	0	0	= 2	285-285	PM
New London													
Lawrence and Memorial Hospitals	P B Hartman	73	3,997#	47	30		3*	0	0	0	= 3	250-300	FP
Norwalk													
Norwalk	H Genvert	69	1,721	17	47	273	4	0	0	0	= 4	300-300	FP
Stamford													
Stamford	J C Rauls	92	4,705	135	83	8 179	2	1	0	0	= 3	200-300	PM
DISTRICT OF COLUMBIA													
Washington													
Eastern Dispensary and Casualty	J R Young	72	3,785	28	46	11,890	2	2	0	0	= 4	300-350	FM
Sibley Memorial	P S Putzki	68	1,935	45	56		2	1	0	0	= 3	200-400	FM
FLORIDA													
Jacksonville													
St Luke's	R P Thompson	96	2,740	17	28		2*	0	0	0	= 2	325-375	PM
Miami Beach													
St Francis	J Jana	74	3,897#	23	52	7 710	2	0	0	0	= 2		FM
St Petersburg													
Mound Park	W Rautenstrauch	96	35,120	111	31		1	0	0	0	= 1	300-300	FM
ILLINOIS													
Berwyn													
MacNeal Memorial	W J Vynalek	52	1 199	65	60		2	0	0	0	= 2	250-350	PM

Numerical and other references are listed on pages 811 through 814

28 SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O
ILLINOIS—Continued													
Chicago													
Alexian Brothers	I Khedroo	78	1,282	21	57	1 210	1	0	0	0	= 1	200-200	FM
Englewood	M M Wasick	51	2,255	36	31		1	0	0	0	= 1	200 200	FM
Hospital of St Anthony De Padua	R F Feborick	66	3 050	32	12	101	2	0	0	0	= 2	250-250	FM
Norwegian American	A Triolo	66	2 841	25	36	1 230	3	0	0	0	= 3	225 225	FM
Ravenswood	A Mickow	32	1 908	85	56	31	4	0	0	0	= 4	300-300	FM
St Anne s	P F Fox	53	2 387	62	22	1 750	3	0	0	0	= 3	250 275	FP
St Bernard s	F Balcer	68	2 747	32	50	7 158	2*	0	0	0	= 2	200 250	FP
Woodlawn	H P Jenkin		1 004	6	100		1	0	0	0	= 1	200-	PM
Evergreen Park													
Little Company of Mary	M J McCarthy	141	7 010	30	35	27 457	4*	2	2	2	= 10	225 275	FM
La Grange													
Community Memorial General	T H Cross		1 973	25	68							300	
Peoria													
Methodist Hospital of Central Illinois	C W Clebelhausen		5 492	67	42	3 767	2	2	1	0	= 5	200 300	FM
Rockford													
St Anthony	R C Smith	55	4 024	23	34		1	1	0	0	= 2	200 300	FM
INDIANA													
Muncie													
Ball Memorial	S W Burwell	124	5 224	73	41		1	0	0	0	= 1	250 250	FM
IOWA													
Iowa City													
Mercy	J W Dahn	41	2 997	56	30		1	0	0	0	= 1	200-	FM
KANSAS													
Wichita													
Wesley	H W Brooks	134	6 663	60	50		1	0	0	0	= 1	295 375	FM
KENTUCKY													
Lexington													
Good Samaritan	A E Grimes	57	3 308	60	32		4	2	2	1	= 9	220 240	FM
Louisville													
Norton Memorial Infirmary	P Imes	37	1 540	28	32		6	0	0	0	= 6	310 360	FM
LOUISIANA													
New Orleans													
Hotel Dieu	M Salatich	87	1 823	19	26	288	2	2	0	0	= 4	225-250	FP
MAINE													
Lewiston													
Central Maine General	M V Cox	83	4 294	80	49	1 407	1	0	0	0	= 1	175-310	FP
MARYLAND													
Baltimore													
Bon Secour	S G Sullivan	68	3 687	67	33	6 976	2*	1	0	0	= 3	260 270	FM
MASSACHUSETTS													
Boston													
New England	A Brown	29	1 364	18	50		2	0	0	0	= 2	225 275	FM
Fitchburg													
Burbank	F P Ross	76	2 755	60	67	2 921	1	1	0	0	= 2	200-250	FM
MICHIGAN													
Dearborn													
Oakwood	S C Zawacki	109	5 584	54	55		2*	0	0	0	= 2	250	FM
Detroit													
Evangelical Deaconess	T H Hunt	78	3 375	40	65	1 806	2	0	0	0	= 2	317 317	PM
Jennings Memorial	J B Hartzell	40	385	7	29	47							
Woman s	J R Brown	90	3 292	33	50	316	3	0	0	0	= 3	475-475	O
Grosse Pointe													
Bon Secour	C R DeFever						1	1	0	0	= 2	415 465	FM
Kalamazoo													
Borge	J J Martens	79	3 164	58	64	5 732	2*	0	0	0	= 2	275-	FP
Lansing													
Edward W Sparrow	J M Wellman	103	7 353#	47	43	49	1	1	0	0	= 2	300-400	FM
MINNESOTA													
Minneapolis													
Northwestern	H Buchstein	108	4 033	61	64	481	3	0	0	0	= 3	225 225	FP
St Paul													
St Joseph s	C F Rea	78	1 668	9	41	401	2	0	0	0	= 2	355-355	PM
MISSOURI													
Kansas City													
St Joseph	A I Stockwell		4 518	59	37	2 409	4	0	0	0	= 4	250	FM
St Joseph													
Missouri Methodist	J R McDaniel		4 517	116	36		3	0	0	0	= 3	225-225	FM
St Louis													
St Anthony	A Repetto	225	3 890	71	25	11 000	3	0	0	0	= 3†	250 300	FM
NEBRASKA													
Lincoln													
St Elizabeth	R F Mueller	64	3 744	47	36		3	0	0	0	= 3	350 350	FM
NEW JERSEY													
Montclair													
Mountainside	C W Moeckel	89	3 766	47	38	1 503	1	0	0	0	= 1	250-250	FP
Morristown													
Morristown Memorial	E Watkin	51	5 971	66	58	4 794	2	0	0	0	= 2	225-27	PM
Neptune													
Fitkin Memorial	M Q Hancock	29	1 671	40	32	1 778	2	0	0	0	= 2	250-250	FM
Newark													
United Hospital of Newark													
Presbyterian-Woman s	J J McGuire	135	4 847	106	26	903	3	0	0	0	= 3	275-325	O
St Michael s	J J Connolly	87	3 147	48	27	3 965	3	0	0	0	= 3	150-	FM

Numerical and other references are listed on page 811 through 814

28 SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961-1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min-Max	Main Program
NEW YORK													
New York City													
Columbus	V Carabba	1[illegible]	1,663	130	36	1,824	[illegible]	0	0	0	= [illegible]	160-200	FM
Hospital for Joint Diseases	J R Wilder	62	1,453	40	37	17,382	6	0	0	0	= 6	80-80	FM
Jewish Memorial	B Sherwin	51	2,126	43	32	2,490	1	0	0	0	= 1	200-200	FM
Lebanon	H Gordiner, H Wesson	70	2,601	60	47	1,179	2	1	0	0	= 3	150-150	FM
Mother Cabrini Memorial	J P Alvich	39	1,477	36	25	1,934	1	1	1	0	= 3	150-200	FM
New York Infirmary	L E Loeske	33	1,338	23	22	6,768	2[illegible]	1	0	0	= 3[illegible]	150-150	FM
Port Chester													
United	G O Trembl[illegible]	102	1,331	110	29	2,993	2	0	0	0	= 2	[illegible]	FM
NORTH DAKOTA													
Bismarck													
Bismarck	R H Waldschmidt	32	1,049#	17	51	607	3	0	0	0	= 3	200-[illegible]	FM
Fargo													
St Luke's	V G Borland	12	2,148	29	65		2	0	0	0	= 2	300-300	FM
OHIO													
Cincinnati													
Deaconess	R W Good S Hamilton	70	3,389	62	29	1,158	3	0	0	0	= 3	250-250	FM
Elyria Memorial	R F Hayes	76	4,315	62	79		2	0	0	0	= 2		FM
Hamilton													
Mercy	W F Hume	65	2,172	61	38		2	2	2	0	= 6†	200-300	FM
Mansfield													
Mansfield General	P S Test	266		179	46	27,225	4	0	0	0	= 4	200-300	FM
Toledo													
Flower	W H Meffley	83	1,887	13	50	97	1	0	0	0	= 1	300-325	FM
OKLAHOMA													
Oklahoma City													
Wesley	A H Bell	27	1,179	34	50		2	0	0	0	= 2	150-150	
OREGON													
Portland													
Emanuel	H D Colver	69	3,782#	70	64		2	1	0	0	= 3	250-[illegible]	FM
Providence	J Adams	202	9,150	132	68		4	0	0	0	= 4	200	FM
PENNSYLVANIA													
Altoona													
Altoona	L I Taylor	147	4,138	82	28	8,161	1	0	0	0	= 1	325-400	FM
Bradford													
Bradford	S A McCutcheon	63	2,389	66	20		0	2	0	0	= 2	250-250	FM
Hazleton													
Hazleton State	J P H Kettrick	64	1,964	96	14		4	0	0	0	= 4	197-396	FM
St Joseph	L LaBuz	77	3,426	24	1	1,090	1	1	0	0	= 2	400	FM
Johnstown													
Conemaugh Valley Memorial							1	0	0	0	= 1	300-300	
Philadelphia													
Jeanes	L A Bothe	75	3,308	163	51	18,108	3	0	0	0	= 3	300-300	FM
St Joseph's	J A Lehman	32	1,028	19	6	1,519	2	0	0	0	= 2	250-250	FM
St Mary's Franciscan	W J Tourish	22	1,302	17	29		2	0	0	0	= 2	175-200	FM
Woman's			1,680	29	72	1,237	1	0	0	0	= 1	300-300	FM
Pittsburgh													
St Margaret Memorial	J R Watson		2,008	29	35	1,394	1	0	0	0	= 1	300-300	FM
Wilkes-Barre													
Mercy	J Blaum	65	2,188	82	27	1,412	0	2	0	0	= 2	325	
Wilkes-Barre General	P J Morgan												
Wilkinsburg													
Columbia	P S Swan	81	3,181	85	32		2	0	0	0	= 2	400-400	FM
TENNESSEE													
Chattanooga													
Memorial	C H McCall	61	3,108	22	1		4	0	0	0	= 4	300-350	FP
Newell	J I Newell Jr	40	2,161	60	23	21,090	3	0	0	0	= 3	300-300	FP
Knoxville													
St Mary's Memorial	C J Chumley	72	3,279	65	60	511	1	1	0	0	= 2	250-275	FP
TEXAS													
Dallas													
Gaston	J V Goode	72	3,622	95	35	150	4	0	0	0	= 4	300-350	FP
Fort Worth													
Harris	W W McKinney	160	2,257	20		89	2	0	0	0	= 2	300-325	FP
Houston													
St Luke's Episcopal	W D Seybold	79	3,136	12	62		4	0	0	0	= 4	100-100	FM
Southern Pacific													
UTAH													
Ogden													
Thomas D Dee Memorial	R Howe	68	3,106	16	8	746	2	0	0	0	= 2	375-350	FM
Salt Lake City													
Holy Cross	H B Harmon	55	1,852	60	53		2	0	0	0	= 2	175-400	FP
St Mark's													
VIRGINIA													
Newport News													
Riverside	A C Stanton	61	2,313#	29	38		2	0	0	0	= 2	250-250	FP
Richmond													
Richmond Memorial	F P Coleman	98	4,764	62	56	8,081	2	0	0	0	= 2	300-350	FM
St Elizabeth's	G W Horsley	27	1,000	18	56		1	1	0	0	= 2	325-375	FM
Roanoke													
Lewis Gale	W I Sibley	79	3,014	40	38	13,715	2	1	0	0	= 3	300-400	FP
WASHINGTON													
Seattle													
Doctors	J J Payne	89		14	55		2	0	0	0	= 2	250-[illegible]	FM
Providence	C F Chism	152	2,641#	90	47	530	6	0	0	0	= 6	250-350	FP

Numerical and other references are listed on pages 811 through 814

28 SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	F M Maintenance F M P M O
WASHINGTON—Continued													
Spokane													
Sacred Heart	C P Schlicke	203	12 572	102	53		2	0	0	0	= 2	250-250	FP
WEST VIRGINIA													
Montgomery													
Laird Memorial	W R Laird		2 060	14	23	9 724	0	2	0	0	= 2	300 300	
WISCONSIN													
Janesville													
Mercy Hospital	F W Reinhardt	37	1 350	27	48		4	0	0	0	= 4	250-250	FM
La Crosse													
La Crosse Lutheran Hospital	S B Cunderlen Sr	54	2 768	31	28		2	0	0	0	= 2	300-300	FM
Madison													
Methodist	H W Mahaffey	110	4 667	118	50	3 275	2	0	0	0	= 2		FM
Marshfield													
St Joseph's	B R Lawton	74	4 479	40	65		2	0	0	0	= 2	350-350	FM
Milwaukee													
Evangelical Deaconess	O C Fais	125	8 202	101	47	799	3	3	0	0	= 6	250-300	FP
St Luke's	R Calasinski	101	2 908	58	31	282	3	0	0	0	= 3	275-275	FM

29 THORACIC SURGERY

Residency programs in the following hospitals have been approved up to June 30 1961 by the Council and the Board of Thoracic Surgery as offering acceptable training in the specialty

Hospitals 110 Residencies 226

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	F M Maintenance F M P M O	Length of Approved Program Years
UNITED STATES ARMY														
CALIFORNIA														
Letterman General San Francisco	S W French III	16	429	6	83	1 284	1	1	0	0	= 2		FM	2
COLORADO														
Fitzsimons General Denver	E M Aronstam	18	288	7	100	904	1	1	0	0	= 2			2
DISTRICT OF COLUMBIA														
Walter Reed General Washington	H A Blake	14	210	11	82	170	1	1	0	0	= 2			2
UNITED STATES NAVY														
CALIFORNIA														
U S Naval San Diego	F M Hanner	39	318	23	96	980	1	1	0	0	= 2			2
NEW YORK														
U S Naval New York City (St Albans)	F F Timmes	10	256	6	67	100	1	0	0	0	= 1			2
NONFEDERAL AND VETERANS ADMINISTRATION														
ALABAMA														
Birmingham														
University of Alabama Medical Center University Hospital and Hillman Clinic	C Tyson	3				6 511						462 462	FM	2
CALIFORNIA														
Duarte														
City of Hope Medical Center	A Goldman	14	227	20	85	52	2	0	0	0	= 2	400-400	O	1
Los Angeles														
Veterans Administration [89]	F A Byron	18	289	28	71	304	0	0	0	1	= 1	463-463	PM	2
Oakland														
Children's Hospital of the East Bay	I C Samson	6	104	8	100	164	1	0	0	0	= 1	350 350	PM	1
Highland Alameda County [9]	D F Dugan	15	265	16	38	673	2	1	0	0	= 3	200-250	FM	2
Olive View														
Olive View Sanatorium														1
Torrance														
Harbor General	F Cope	5	190±	13	75	1 095	1	1	0	0	= 2	319-337	FM	2
COLORADO														
Denver														
National Jewish	M M Newman	15	221	15	86	50	1	1	0	0	= 2	266 344	PM	2
Veterans Administration	R K Brown	5	110	3	100		1	1	0	0	= 2	271-462	O	1
CONNECTICUT														
New Haven														
Yale-New Haven Medical Center Grace-New Haven Community	G L Lindskog	11	322	16	75	350	0	0	0	1	= 1	125	FM	2
Hospital of St Raphael	M C Carter	8	241	19	74	224	1	1	0	0	= 2	300-335	PM	2
Newington														
Cedarcrest	R I Kemler		221	1			1	0	0	0	= 1	350-350	O	1
Norwich														
Uncas on Thames	W O Kelley		130	9	22		2	0	0	0	= 2	161 278	FM	1
DISTRICT OF COLUMBIA														
Washington														
George Washington University	B Blades	16	560	12	66	1 459	1	1	0	0	= 24	250-250	PM	2
FLORIDA														
Miami														
Jackson Memorial	R S Litwak		517	37	69		1	1	0	0	= 2	375-400	PM	2

Numerical and other references are listed on pages 811 through 814

29 THORACIC SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Rotations FM PM O	Length of Tr After Res (Years)
GEORGIA														
Atlanta														
Emory University	O Abbott	22	802#	32	59		2	2	0	0 =	4‡	235 265	PM	*
Grady Memorial	O A Abbott						0	0	0	1 =	1	200-200	FM	*
Augusta														
Medical College of Georgia Hospitals														*
Eugene Talmadge Memorial	R Ellison	12	299	13	100	395	0	0	0	2 =	4	300-388	O	
Battey State (Rome)	R F Corpe													
HAWAII														
Honolulu														
Leahi	P W Gebauer	20	597	1		460	1	0	0	0 =	1‡	400 400	FM	1
ILLINOIS														
Chicago														
Chicago State Tuberculosis Sanitarium	H T Langston	28	158	4			0	0	0	2 =	2	351 351	O	1
Children's Memorial			Inc in Surgery											1
City of Chicago Municipal Tuberculosis Sanitarium	W M Lees	100	1 530	27	59	2 334	0	0	0	8 =	8	383-402	FM	1
Northwestern University Medical Center Veterans Administration Research	F W Preston	19	277	14	65		0	1	0	1 =	2	271 462	O	
Hines														
Veterans Administration	H Langston	54	207	18	58	320	0	0	0	2 =	2‡	412-462	O	*
Hinsdale														
Suburban Cook County Tuberculosis	V I Reimann	30	148	1	100	1,037	0	0	0	1 =	1	200 600	O	1
IOWA														
Iowa City														
State University of Iowa Hospitals	I I Ehrenhaft	20	600	32	81					=	2‡	41[illegible] 600	PM	*
KANSAS														
Kansas City														
University of Kansas Medical Center	I Albritton						0	0	0	1 =	1	200 200	PM	1
LOUISIANA														
New Orleans														
Charity Hospital of Louisiana														
Louisiana State University Unit	L H Strug	8	187	14	71	954	1	1	0	0 =	2	200 225	FM	*
Tulane University Unit	O Creech	6	126	17	70	461	1	1	0	0 =	2	200-225	FM	*
Shreveport														
Confederate Memorial Medical Center	W W McCook	8	288	[illegible]	40	1 041	0	0	1	1 =	2	200-300	FM	1
MARYLAND														
Baltimore														
University	R A Cowley	40	650	18	85	600	3	3	0	0 =	6	200 250	PM	2
Veterans Admin	R F Kieffer	30	160	[illegible]	60		1	0	0	0 =	1	271 462	PM	1
MASSACHUSETTS														
Boston														
Boston City	J W Strieder	15	242	22	70	657	0	2	0	0 =	2	208-248	FM	2
Boston Sanatorium	J W Strieder	20	111	3	67									1
New England Deaconess	R Overholt	192	1 959	52	75	1 050	2	2	0	0 =	4	200 235	PM	*
MICHIGAN														
Ann Arbor														
University	C Haight	35	669	31	74	1 484	0	2	2	4 =	8	215-275	O	2
Detroit														
Henry Ford	C R Lam	25	811	51	88	473	4	2	0	0 =	6	265-305	PM	*
Herman Kiefer	W M Tuttle	115	420	8	63		4	2	0	0 =	6	380-638		*
Lansing														
Ingham Chest	C I Stringer	111	759	7	29	39 377	1	0	0	0 =	1	300 400	FM	*
MINNESOTA														
Minneapolis														
Veterans Admin	D I Ferguson	17		18	91	912	1	1	0	0 =	2	271-462		2
Oak Terrace														
Glen Lake Sanatorium	V K Funk	296	281	29	72	35 748	1	1	0	0 =	2	391-446	O	1
Rochester														
Mayo Foundation-222	O T Clagett											200		2
MISSISSIPPI														
Jackson														
University	J D Hardy	4	352#	6						=	2	325	O	*
Sanatorium														
Mississippi State Sanatorium	W R Webb	18	244	6	33	190	1	0	0	0 =	1	300	PM	1
MISSOURI														
Mount Vernon														
Missouri State Sanatorium	J W Polk						2	0	0	0 =	2	400-	O	1
St Louis														
Barnes	T Burford	25	818	48	76	470						250-300	FM	2
NEW JERSEY														
Jersey City														
B S Pollak Hospital for Chest Diseases	F Bortone		61	6	33		2	0	0	0 =	2	167 250	FM	2
NEW YORK														
Albany														
Albany	A Stranahan	19	818#	36	69	53	1	1	0	0 =	2	215 275	PM	*
Buffalo														
Buffalo General	J R Paine	36	807#	77	96	1 866	2	2	0	0 =	4	175-75	FP	2
Edward J Meyer Memorial	J D Stewart	9	108	13	46	275						292 380		2
Veterans Administration	W M Chardack		142	21	62		1	1	0	0 =	2	412-462	O	*
Castle Point														
Veterans Administration	R Douglass	38	378	2			1	0	0	0 =	1			1

Numerical and other references are listed on pages 811 through 814

29 THORACIC SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O	Length of Approved Program (Years)
NEW YORK—Continued														
Mount Morris														
Mount Morris Tuberculosis	J M Judd		154				2	0	0	0	= 2	758 758	O	1
New York City														2
Bellevue Hospital Center														
Div 1—Columbia University [261]	R H Wylie	15	204	16	38	277	2	2	0	0	= 4	145 195		
Bronx Municipal Hospital Center	D State			21	38		2	2	0	0	= 4	265	FM	2
Kings County Hospital Center	K F Karlson	41	372	65	38	866	2	2	0	0	= 4	145-195		2
Maimonides	A Hurwitz	8	120	11	82		0	0	0	1	= 1	150 150	FM	1
Montefiore	A H Aufses		127	10	78		0	0	0	1	= 1	257 257	PM	1
New York Medical College—Metropolitan Medical Center														
Metropolitan	S A Thompson	15	16	20	20	351	1	1	0	0	= 2	145-195	FM	1
St Joseph's Hospital														
For Chest Diseases	W W Fischer	30	232		60		1	1	0	0	= 2	300-	FM	1
Sea View	I R Davidson		71	15	80	467	3	0	0	0	= 3	145-195		1
Triboro	L Miscall	30	71	24	43		4	4	0	0	= 8	145-195		2
Veterans Administration (Bronx) [90]	P Cooper	11	135	6	50	96	1	1	0	0	= 2	412 462	O	2
Veterans Administration (Brooklyn)	R Klopstock	10	291	17	58	156	1	1	0	0	= 2	412 462	O	2
Veterans Administration (Manhattan) [90]	H Stern	20	180	27	62	288	0	0	1	2	= 3	271 285	O	2
Oneonta														
Homer Folks Tuberculosis	V M Skinner	25	125				1	0	0	0	= 1	569-686	O	1
Sunmount														
Veterans Administration	V S Wojnar	15	26	1	100		0	0	0	1	= 1	290 462	O	1
NORTH CAROLINA														
Chapel Hill														
North Carolina Memorial	R M Peters	7	293	10	69		0	0	0	1	= 1	266 266	O	1
Charlotte														
Charlotte Memorial	V G Brenizer	9	226±	12	75	52	1	1	0	0	= 2	295-315	PM	2
Durham														
Duke	W C Sealy	21	676	35	57	1 017						43 200	FMO	2
Oteen														
Veterans Administration	H F Walkup	110	609	73	82	95	0	0	0	4	= 4	462 462	O	2
Winston-Salem														
North Carolina Baptist														
OHIO														
Cleveland														
Cleveland Clinic	D B Effler	16	479	28	68	1 818	2	2	0	0	= 4	350-400		2
Cleveland Metropolitan General	G H A Clowes Jr	5	130	15	47	451	1	1	0	0	= 2	217 258	FM	2
Veterans Administration [210]	H J Mendelsohn	11	152	11	64	64	1	1	0	0	= 2	271-462	PM	2
Columbus														
Benjamin Franklin Mount Carmel	M G Buckles	28	304	16	56	296	2	0	0	0	= 2	400-400	FM	2
Ohio State University Hospitals														2
Ohio Tuberculosis	N C Andrews			12	100		0	0	0	2	= 2	277 277	PM	
University Hospitals	K P Kinsman	15	560	28	89	344	0	0	0	2	= 2	277 277	PM	
OKLAHOMA														
Oklahoma City														
University of Oklahoma Medical Center	C S Campbell						1	1	0	0	= 2			2
University Hospitals		18	306	15	73	529						240 300	PM	
Veterans Administration														
OREGON														
Portland														
University of Oregon Medical School Hospitals and Clinics	W S Conklin	47	246	36	75		1	1	0	0	= 2	165-215	FM	2
PENNSYLVANIA														
Philadelphia														
Episcopal	J J F O'Neill	6	115	9	33	279	1	0	0	0	= 1	150 150	FM	1
Hahnemann Medical College and *Hospital*	H J Nichols	40	965	110	27		2	2	0	0	= 4	75-75	FM	2
Presbyterian [330]	R Glover	11	309	26	88	150	2	2	0	0	= 4	235-290	FM	2
Pittsburgh														
Health Center Hosps of the Univ of Pittsburgh School of Medicine														
Allegheny General														3
Children's														
Presbyterian	J M Kent	8	173	12	58					2	= 5	125-175	FM	
TENNESSEE														
Knoxville														
University of Tennessee Memorial Research Center and Hospital [348]	R W Newman	6	182	6	5	265	1	1	0	0	= 2	330-310	FM	2
Memphis														
City of Memphis Hospitals	H Wilson		272	21	66	491	0	0	1	0	= 1	150-200	FP	2
Veterans Administration	F A Hughes	48	482	66	79	290	2	0	0	0	= 2	271-412	PM	2
West Tennessee Tuberculosis	F H Cole	81	261	9	33	221	2	2	0	0	= 4	330-490	FM	2
Nashville														
Vanderbilt University	R A Daniel	11	299	39	67	698	0	0	0	2	= 2	100-125	FM	2
TEXAS														
Dallas														
Baylor University [38]	R R Shaw	15	651	18	56	115	2*	0	0	0	= 2	210-230	PM	2
Parkland Memorial	H Wilson	11	298	29	45	632	0	0	0	1	= 1	275-275	PM	2
Veterans Administration	R H Holland	22	190	40	88	420	0	0	0	1	= 1	412-462	PM	2
Galveston														
University of Texas Medical Branch Hospitals	A W Harrison	13	310	14	29	155	1	1	0	0	= 2	160-160	FP	2
Houston														
Baylor University College of Medicine Affiliated Hospitals														
Jefferson Davis	M E De Bakey						1	1	0	0	= 2	165-165	FM	2
Methodist	L I D Tuttle	10	619	64	73									
Veterans Administration	G I Jordan	10	261	25	78		1	1	0	0	= 2	412-462	PM	

Numerical and other references are listed on pages 811 through 814

29 THORACIC SURGERY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM 0	Length of Appr Prog (Yrs)
UTAH														
Salt Lake City														
Dr W H Groves Latter Day Saints	W R Rumel	14	609	42	76		1	0	0	0	= 1	325 375	FP	2
VIRGINIA														
Charlottesville														
University of Virginia	I C Drash	11	566	19	53	2 118	0	0	0	1	= 1	75 100	FM	3
Richmond														
Veterans Administration [3-4]	I H Bosher Jr	17	207	24	63	260	1	1	0	0	= 2	271 412	PM	3
WASHINGTON														
Spokane														
Sacred Heart	R Berk Jr	5	110	8	75		0	0	1	0	= 1	325 325	FP	1
WISCONSIN														
Milwaukee														
Veterans Administration (Wood)	W Weisel	12	239	21	90	559	0	0	0	1	= 1	412 462	PM	*

30 UROLOGY

Residency programs in the following hospitals have been approved by the Council and the *American Board of Urology*, through the Residency Review Committee for Urology These programs are approved for THREE years of training All hospitals listed offer three years of training intramurally or on an integrated basis through affiliation with another approved institution

Hospitals, 233, Residencies, 769

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM 0
UNITED STATES AIR FORCE													
TEXAS													
U S Air Force San Antonio	I I Cook Jr	29	734±	4	75	4 097	1	1	1	1	= 4		
UNITED STATES ARMY													
CALIFORNIA													
Letterman General San Francisco	J F Lewis	25	1 153	11	55	4 023	1	1	1	0	= 3		FM
DISTRICT OF COLUMBIA													
Walter Reed General Washington	C B Hewitt	7	567	17	76	11 738	1	1	1	0	= 3		
HAWAII													
Tripler Army, Honolulu	C A Moore	29	901	5	80	5 794	2*	1	1	0	= 4		
TEXAS													
Brooke General San Antonio	F K Mantell	39	1 090	15	93	6 505	1	1	1	0	= 3		
UNITED STATES NAVY													
CALIFORNIA													
U S Naval, Oakland	M S Curtis	35	687	7	85	5 229	1	1	0	1	= 3		
U S Naval San Diego	F R Dillon Jr	69	1,307	19	68	8 879	1	1	2	1	= 5		
MARYLAND													
U S Naval, Bethesda	A A Calinsky	60	550	3	67	9 801	1	1	1	2	= 5		
NEW YORK													
U S Naval New York City (St Albans)	C W Lewis Jr	25	580	1	100	3 123	1	1	1	1	= 4		
PENNSYLVANIA													
U S Naval Philadelphia	J A Sysio	38	607	20	45	2 600	1	1	1	1	= 4		
UNITED STATES PUBLIC HEALTH SERVICE													
NEW YORK													
U S Public Health Service New York City	C D Miller	54	1 052	8	63	8 490	1	1	2	0	= 4		
DEPARTMENT OF HEALTH EDUCATION, AND WELFARE													
DISTRICT OF COLUMBIA													
Freedmen's Washington	K F Jones	14	521	22	41	2 515	0*	1	1	1	= 3	308 417	FM
NONFEDERAL AND VETERANS ADMINISTRATION													
ALABAMA													
Birmingham													
Carraway Methodist	H Hudson	11	545	11	37		1	0	0	0	= 1	290 00	FM
University of Alabama Medical Center	B Barclare	36	573	8	90	2 189	1	1	0	0	= 2	113 118	FM
University Hospital and Hillman Clinic	S W Shirley	27	307	4	75	517	1	0	0	0	= 1	273 347	0
Veterans Admin													
ARKANSAS													
Little Rock													
University	I W Heidstream	14	634	8	3	4 052	1	1	1	1	= 4	170 3	0
CALIFORNIA													
Arlington													
General Hospital of Riverside County—See White Memorial, Los Angeles													
Bakersfield													
Kern County General	D Lalk	[illegible]	224	12	67	2 865	1	0	1	0	= 2	300 425	0

Numerical and other references are listed on pages 811 through 814

30 UROLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Affiliation FM PM O
CALIFORNIA—Continued													
Long Beach													
Veterans Admin	A J Birchoff	46	497	14	86	2 870	1	1	1	1	= 4	271-462	O
Los Angeles													
Kaiser Foundation	J F Cooper	1[illegible]	1 224	1[illegible]	60	7 967	1	1	0	0	= 2	275-32[illegible]	PM
Los Angeles County [illegible]	J Lombardo R Barnes	81	2 423	176	3[illegible]	17 611	2	2	2	2	= 8	273 319	PM
University of California Medical Center													
University of California	W F Goodwin	1[illegible]	[illegible]	14	93	2,313	1	1	1	1	= 4	240 314	FPO
Veterans Admin	W E Goodwin	67	1 179	[illegible]	77	2 9[illegible]	3	2	2	1	= 8[illegible]	293-463	PM
Harbor General (Torrance)	C Winter R Turner	2[illegible]	342#	47	41	3 [illegible]	1	1	1	1	= 4	273-319	FM
White Memorial [illegible]	T Bergman	9	474	9	67	[illegible]968	1	1	1	1	= 4	21[illegible]-280	PM
General Hospital of Riverside County (Arlington)													
Oakland													
Highland-Alameda County	H T Kay	14	412	18	44	2 373	1	1	1	0	= 3	200-29[illegible]	FM
San Diego													
San Diego County General	S C Peck	20	499	35	68	2 619	1	1	1	0	= 3	300-400	FM
San Francisco													
Presbyterian Medical Center	H M Weyrauch	10	46[illegible]	1	100	2 890	1	1	1	0	= 3	100 17[illegible]	PM
Southern Pacific General	J E Gibson	18	7 048	4		41 3[illegible]	1	0	1	0	= 2	200-32[illegible]	FM
University of California Hospitals													
San Francisco General	E Hinman Jr	30	591	54	39		1	1	1	0	= 3	220-360	O
University of California	D R Smith	16	674	7	86	4 [illegible]3	3	3	3	0	= 9	220-412	
Veterans Admin	D R Smith H M Weyrauch	21	321	8	7[illegible]	1 138	1	1	1	0	= 3	271-462	O
Torrance													
Harbor General	See University of California Medical Center Los Angeles												
COLORADO													
Denver													
University of Colorado Medical Center													
Colorado General	O C Stonington	10	367	3		2 232	1	1	1	0	= 3	180-20[illegible]	O
Denver General	D F Newland		2[illegible]#	27	63							179 20[illegible]	
Veteran Admin	O C Stonington	32	4[illegible]4	13	100		1	0	0	0	= 1	271 293	O
CONNECTICUT													
New Haven													
Yale-New Haven Medical Center													
Grace-New Haven Community	B M Harvard	33	1 080	23	[illegible]0	1 887	0	2	1	0	= 3	7[illegible]-12[illegible]	FM
Veteran Admin (West Haven)	J F Walsh						0	1	0	0	= 1	293-293	
Waterbury													
Waterbury	A C Stocking	16	[illegible]6	11	30	179	1	0	0	0	= 1	22[illegible]-27[illegible]	FM
DELAWARE													
Wilmington													
Delaware	J H Furlong	17	489#	15	87	894	1	0	1	0	= 2	220 260	FP
DISTRICT OF COLUMBIA													
Washington													
District of Columbia General	R Baker I Culbertson	13	3[illegible]4	28	2[illegible]	2 480	2	1	1	0	= 4	233 283	O
Veterans Admin—Georgetown University [illegible]													
Georgetown University			Inc in Surgery										
Veterans Admin	C V Higgins	17	63#	11	64	706	0	2	1	0	= 3	271 347	O
FLORIDA													
Gainesville													
University of Florida Teaching Hospital and Clinics													
Jacksonville													
Duval Medical Center—St Vincent's													
Duval Medical Center	W A Van Nortwick	10	3[illegible]	13	31	2 940	0	1	1	0	= 2	22[illegible]-2[illegible]0	FM
St Vincent's	W A Van Nortwick	13	674#	7	47		1	0	0	0	= 1	32[illegible]-37[illegible]	PM
Miami													
Jackson Memorial	C R Prout		1 179	38	29	5 04[illegible]	2	2	3	0	= 7	22[illegible] 32[illegible]	PM
Orlando													
Orange Memorial	J I Campbell	33	1 [illegible]08	33	[illegible]4		1	1	1	1	= 4	32[illegible]-400	O
Tampa													
Tampa General													
Veterans Admin (Bay Pines)													
GEORGIA													
Atlanta													
Grady Memorial	C Rieser	29	469	14	43	8,371	2	2	2	0	= 6	12[illegible]-200	FM
Veterans Admin	I Halliwanger	20	314	12	4[illegible]		1	0	1	0	= 2	293-462	PM
St Joseph's Infirmary [illegible]	H P McDonald	22	1 031	7	8[illegible]	2 101	2	1	1	0	= 4	270-30[illegible]	PM
Augusta													
Medical College of Georgia Hospitals													
Eugene Talmadge Memorial	R Rinker	14	3[illegible]8	11	82	1,348	0	1	0	1	= 2	333-[illegible]00	O
University	W Tucas	1[illegible]	663	16	13	1 077	1	1	0	0	= 2	200-2[illegible]0	O
Savannah													
Memorial Hospital of Chatham County	P I Scardino	1[illegible]	[illegible]33	12	67	79[illegible]	1	1	1	0	= 3	3[illegible]0	FM
ILLINOIS													
Chicago													
Cook County	J L Wilkes	[illegible]9	874	6[illegible]	37	3 768	2	2	1	0	= [illegible]	140-140	FM
Mercy	E Wilson	10	522	18	11	2 484	1	1	1	0	= 3	22[illegible]-300	PM
Michael Reese [illegible]	I I Shapiro	[illegible]0	1 130	[illegible]	77	1 638	1	1	1	0	= 3	12[illegible]-17[illegible]	FP
Mount Sinai	H S Takin	10	411	14	28	1 021	0	1	1	1	= 3	22[illegible]-300	PM
Northwestern University Medical Center													
Chicago Wesley Memorial	V I O Conor	19	661	18	67	2 730	1	0	1	0	= 2	12[illegible]-1[illegible]0	FM
Passavant Memorial	J T Grayback	11	6[illegible]2	4	100						= 1	225-275	PM
Veterans Admin Research	V I O Conor	30	641	24	79		0	1	0	1	= 2	271 462	O
Presbyterian-St Luke's	F C Graf	2[illegible]	1 002	10	80	2,300	1	1	1	0	= 3	12[illegible]-200	FM
University of Chicago Clinics	C W Vermeulen	13	491	8	50	6 440	1	1	1	1	= 4	2[illegible]0-30[illegible]	O
University of Illinois Research and Educational Hospitals	J H Kiefer J H McDonald	17	371	9	88	5 013	0	0	1	0	= 1	160-24	PM
Hines													
Veterans Admin [illegible]	F Floyd	[illegible]4	70[illegible]	49	[illegible]1	1,2[illegible]6	0	3	3	3	= 9	293-412	O

Numerical and other references are listed on pages 811 through 814

30 UROLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include Transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Affiliation FM PM O
INDIANA													
Indianapolis													
Indiana University Medical Center [170]													
Indiana University Medical Center	R A Garrett	65	1,104	16	63	5,815	2	2	2	0	= 6	225-300	PM
Marion County General	J W Hendricks	14	395	17	59	2,597	1	1	1	1	= 4	269 318	PM
Veterans Admin	R A Garrett										= 2	271-462	O
Methodist	W I Sutton	52	2,142	29	41	237	1	1	1	1	= 4	290 380	PM
IOWA													
Des Moines													
Veterans Admin [1]	J J Arduino	27	802	26	66	872	1	1	1	0	= 3	271-412	PM
Iowa City													
State University of Iowa Hospitals	R H Hocks	68	2 059	87	76	7 653	3	3	3	0	= 9	200-255	FM
KANSAS													
Kansas City													
University of Kansas Medical Center	W Valk	31	878	35	40	2 488	2	2	2	0	= 6	125 271	PM
Veterans Admin (Kansas City, Mo)	W I Valk	20	399	12	83						= 2	271 271	O
KENTUCKY													
Lexington													
Good Samaritan-St Joseph													
Good Samaritan	D L Scott	22	601	17	24		1	1	0	0	= 2	220-240	FM
St Joseph	J H Ray	17	664	16	56	177	1	1	1	0	= 3	220-240	FP
Louisville													
University of Louisville Medical Center													
Louisville General	L Lich Jr	10	289	11	64	1 493	0	1	1	1	= 3	141 166	FM
Veterans Admin	H I Berman	21	311	20	70	877	1	1	0	0	= 2	270-317	O
LOUISIANA													
New Orleans													
Charity Hospital of Louisiana													
Louisiana State University Unit	H T Beacham	27	898	38	41	7 529	2	2	2	0	= 6	125-175	FM
Tulane University Unit	J Schlegel	32	995	34	53	7 288	2	2	2	2	= 8	125-175	FM
Ochsner Foundation [150]	L Burns	11	515	9	44	8 879	1	1	1	0	= 3	225-	PM
Veterans Admin [30]	L Burns	31	599	18	88	661	0	1	1	0	= 2	270 318	O
Touro Infirmary [10]	G Tomskey		889	16	50	1,924	1	0	0	0	= 1	125-175	FP
Shreveport													
Confederate Memorial Medical Center	R K Womack	30	1,158	29	31	1 501	1	1	1	1	= 4	125 200	FM
MARYLAND													
Baltimore													
Johns Hopkins	W W Scott	33	1 024#	23	18	7 971	1	0	0	4	= 8	160 185	PM
Sinai [47]	B S Abeshouse	28	666	20	55	1,059	2	2	1	0	= 5	180 300	FM
Fordham [17] (New York City)	J Smiley	15	212	15	15	901	1*	0	0	0	= 1†	145 195	
University	J D Young Jr	25	851	22	68	3 906	2	2	2	0	= 6	200-250	PM
Fort Howard													
Veterans Admin [188]	H Meisel	15	150	13	54	63	1	0	0	0	= 1	271	O
MASSACHUSETTS													
Boston													
Beth Israel [40]	G C Prather						1	1	0	0	= 2	167 250	O
Lawrence F Quigley Memorial [19]													
Soldiers' Home (Chelsea)			Inc in Sum										
Boston City	G Austen, Jr	35	621	29	41	7 356	2	1	1	0	= 4	208 248	FM
Massachusetts General	W F Leadbetter					1 083	1	1	2	0	= 4	108 183	PM
Massachusetts Memorial [3]	D B Stearns	11	138	7	13	921	1	1	1	0	= 3	175-275	O
Lynn [53] (Lynn)	J Lipton	13	532	21	53	330							
New England Center	B G Clarke	3	141			889	1	1	1	0	= 3	237 262	O
Peter Bent Brigham [11]	J H Harrison						0	0	2	1	= 3	62 62	FM
Veterans Admin [11] (West Roxbury)	H T Talbot	16	288	11	61	1 038	1	1	1	0	= 3	237 375	O
Veterans Admin (Jamaica Plain) [204]	R Chute	25	857	25	19	1 936	1	1	1	0	= 3		
MICHIGAN													
Ann Arbor													
University [208]	K M Nesbit	27	1 392	17	59	1 879	0	0	3	0	= 9	215-275	O
Detroit													
Grace	M N Stewart	33	1 267	22	59	681	1	1	1	0	= 3	275 350	FP
Harper	P B Bicknell	37	1 329#	21	12	1,237	1	1	1	0	= 3	300-350	PM
Henry Ford	A W Bohne	22	998	11	73	13 212	2	2	2	0	= 6	265-365	PM
Receiving	D Jaffar	25	600	19	65	5 209	0	0	0	2	= 2	325-400	PM
Eloise													
Wayne County General Hospital and Infirmary	J Lapides	32	483	37	38	827	1	0	0	0	= 1	105 199	FM
MINNESOTA													
Minneapolis													
Minneapolis General-St Mary's													
Minneapolis General	T H Sweetser	10	302	12	83	2,477	1	1	1	1	= 4	235-235	FP
St Mary's													
University of Minnesota Hospitals [210]	C D Creery	22	808	17	82	2,070	1	1	1	1	= 4	244 244	
Veterans Admin [221]	C D Creery	37	968	13	100	4 080	2	3	1	1	= 7	271 162	O
Rochester													
Mayo Foundation [222]	G I Thompson		3,444	20	65		5	5	5	5	= 20	200-333	PM
St Paul													
Ancker-Charles T Miller [74]													
Ancker	F E B Foley	13	312	15	60	2,349	1	1	1	0	= 3	225-235	FM
Charles T Miller		15	633#	7	71	601	0	1	0	0	= 1	270-250	FM
MISSISSIPPI													
Jackson													
University of Mississippi Medical Center													
University	T Ainsworth	9	283#	10	40	1,879	1	1	1	0	= 3	250-300	O
Veterans Admin	S A Sabatini	20	364#	12	75	1,188	0	0	1	0	= 1	270 162	

Numerical and other references are listed on pages 811 through 814

30 UROLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main Maintenance FM PM O
MISSOURI													
Columbia													
University of Missouri Medical Center													
Kansas City													
Kansas City General	A J Stockwell	21	316	16	40	3 621	1	1	1	1	= 4	290 370	PM
Veterans Admin	See University of Kansas Medical Center Kansas City Kansas												
St Louis													
Barnes [21]	J Cordonnier	39	1 117	15	73	3 704	2	2	2	0	= 6	50-150	PM
Homer G Phillips	M Abrams	30	355	30	20	2 671	0	2	1	1	= 4	285 314	
Missouri Pacific	A J Vitt	16	472	9	55	2 103	1	1	1	0	= 3	200 250	PM
St Louis City	C Wattenberg W Melick	21	356	23	52	3 243	0	2	2	2	= 6	231 314	PM
St Mary's Group of Hospitals of St Louis University	W J Melick	21	1 050	20	71	2 209	1	1	1	0	= 3	150-170	FM
Veterans Admin	J J Mihalko	18	348	16	50		1	1	1	0	= 3	271 462	O
NEW HAMPSHIRE													
Hanover													
Dartmouth Medical School Affiliated Hospital													
Mary Hitchcock Memorial	J J Morin	25	696	16	75	1 977	1	1	1	0	=	218 27	
Veterans Admin (White River Jct Vt)	J J Morin	22	696	16	75	1 977	1	1	1	0	= 3	218 273	
NEW JERSEY													
Bayonne													
Bayonne Hospital and Dispensary [18]	A F Balamino	18	960	12	35	200	1	1	1	0	= 3	175 175	FM
East Orange													
Veterans Admin [74]	M Mahrmont	44	682	29	59	699	1	1	1	0	= 3	270-462	
Jersey City													
Jersey City Medical Center	J F Daly	4	782	41	25	1 574	1	1	1	0	= 3	146 200	FM
Newark													
Harrison's Martland Medical Center	J Seidman	21	494	14	20		1	1	1	0	= 3	160 212	FM
NEW YORK													
Albany													
Albany [18]	W Milner	21	901‡	22	45	557	1	1	1	0	= 3	195 275	PM
Buffalo													
Buffalo General	O J Oberkircher	34	1 035‡	13	46	1 500	1	1	1	0	= 3	175 200	FP
Roswell Park Memorial	W J Staubitz	28	275	26	100	3 044	0	1	1	0	= 2	334 381	O
Edward J Meyer Memorial	W J Staubitz	28	337	31	42	1 352	2	2	1	0	= 5	292 332	FM
Millard Fillmore	P V Greco	3	990	5	89		1	1	1	0	= 3	298-323	PM
Hempstead													
Meadowbrook	C J Schmidlapp	21	609	29	45	1 699	1	1	1	0	= 3	275 275	FM
New York City													
Bellevue Hospital Center													
Div II—Cornell University [11]	F W Draper	5	10	32	28	6 871	1	1	1	1	= 4	145 155	
Div IV—New York University Post Graduate Medical School	R S Hotchkiss	50	608	57	30	3 018	45	2	2	0	= 8	145-195	
Beth Israel	F A Orkin	57	890	36	21	1,247	1	1	1	0	= 3	175-225	PM
Bronx Municipal Hospital	H R Newman	26	515	38	50	2 662	2	2	2	0	= 6	215-	FM
City Hospital at Elmhurst	W F Lerbes	25	916	29	48	2 207	1	1	1	0	= 3	145 195	
Fordham	See Sinai Hospital Baltimore												
Francis Delafield	J K Luttinger	2	362	27	50	1 689	2	1	1	1	= 5	145-195	
French	F B Snyder	20	585	8	25	948	1	1	1	0	= 3	120 145	FM
Jewish	A Segal P Katzen		610	14	21	1 451	1	0	1	0	= 2	100 125	FM
Kings County Hospital Center [3] Brooklyn [21]	J C Hamm	6	1 160	88	28	5 581	1	2	2	0	= 5	145 195	
Lincoln [12]	F P Twiner					2 499	1	1	0	0	= 2	145 195	FM
Hackensack [3] (Hackensack N J)	F P Twiner	11	155	9	44	237	1	0	0	0	= 1	150 200	FM
Long Island College	H C Harlin	19	759	22	9	956	0	1	1	0	= 2	164 191	PM
Maimonides	H Hermann			36	36	1 185	0	1	1	1	= 3	100-150	FM
Morrisania City [51]	H Kenyon	17	444	14	30	1 667	1	2	1	0	= 4	145-195	
Mount Sinai	C D Oppenheimer	43	1 106	32	25	7 074	1	1	1	0	= 6	100 100	FM
New York	A Marshall	43	1 237	26	62	9 098	2	2	1	1	= 6	185 265	PM
New York Medical College—Metropolitan Medical Center													
Metropolitan	C R Nagamatsu	23	601	21	36	5 920	2	2	2	0	= 6	145 195	FM
New York Polyclinic Medical School and Hospital	F A Beneventi	23	834	12	50	2 677	1	1	1	1	= 4	150-225	PM
Presbyterian	J K Luttinger	52	1 541	31	45	9 263	1	2	2	0	= 8	267 308	PM
Queens Hospital Center													
Roosevelt	S A Beisler	28	615	16	25	2 399	1	1	1	0	= 3	191 275	PM
St Clare's	C A Fiedler	12	311	11	36	59	1	1	1	0	= 3	125-150	PM
St Luke's	J A Taylor	34	681	19	42	1 111	1	1	1	0	= 3	125 175	PM
Veterans Admin (Bronx)	J K Luttinger	65	980	22	77	240	2	1	2	0	= 5	293-462	O
Veterans Admin (Brooklyn) [1]	W J Samellas	28	415	25	44	780	2	1	1	0	= 4	293 462	O
Veterans Admin (Manhattan) [16]	A H Lim	41	636	31	72	631	0	3	1	0	= 4	271 348	O
Rochester													
Strong Memorial-Rochester Municipal	D J McDonald	19	783‡	1	75	1 148	0	[illegible]	2	1	= 5	166 291	O
Syracuse													
State University of New York Upstate Medical Center	J Harbach	60	1 752	22	47	674	0	1	1	1	= 3	284 350	O
Veterans Admin	W J Barry	2	378				1	0	1	0	= 2	271 347	
NORTH CAROLINA													
Chapel Hill													
North Carolina Memorial	J L Bunce	8	370	6	100	2 464	0	0	1	0	= 1	266-266	O
Charlotte													
Charlotte Memorial	K McKay	22	1,580‡	5	40	1 169	1	1	1	0	= 3	250 [illegible]	FM
Durham													
Duke University Affiliated Hospitals													
Duke	J P Alyea	19	724	12	25	171	2	2	2	0	= 6	175-200	FM
Veterans Admin	F R Alyea	20	408‡	11	64		1	1	0	1	= 3	270-462	O
Watts [26]	J C Roberts	13	815	5	83	883	1	1	0	0	= 2	300 350	FM
Winston Salem													
North Carolina Baptist	E K Garvey	29	1 235‡	9	41	2 947	1	1	0	0	= 2	166-208	PM

Numerical and other references are listed on pages 811 through 814

30 UROLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	Main tenance FM PM 0
OHIO													
Akron													
Akron City	D I Banks	29	1,258			505	1	1	1	0	= 3	300 375	FP
Cincinnati													
University of Cincinnati College of Medicine Hospital Group													
Cincinnati General	T B Wayman	29	744	33	36	4 074	2	2	2	0	= 6	75 250	FM
Veterans Admin	B Wayman	21	331	16	50	520						271 462	0
Cleveland													
Cleveland Clinic	C C Higgins	35	1,468	37	51	15,071	2	2	2	0	= 6	275 300	
Cleveland Metropolitan General	H R Trattner	10	259	7	57	3 003	1	1	1	0	= 3	183 258	FM
Huron Road	V C Laughlin	21	613	7	57	247	1	1	1	0	= 3	215-230	FP
University Hospitals of Cleveland	L Persky	23	1,167	12	83	2,610	0	1	1	1	= 3	183 250	PM
Veterans Admin	L Persky	28	619	17	70	368	1	1	1	0	= 3	271 462	PM
Columbus													
Ohio State University Hospitals University	W M Taylor	25	730	16	81	5 726	0	2	2	1	= 5	202 247	PM
Dayton													
Veterans Admin	G Block	29	225	21	48	619	1	1	1	0	= 3	293-412	0
Toledo													
St Vincent's [24]	I V Ockuly	21	1,000#	10	40	127	1	0	0	0	= 1	275 325	FP
Maumee Valley [24]	I V Ockuly	7	192	13	40	574	0	0	1	0	= 1	285 350	FP
OKLAHOMA													
Oklahoma City													
University of Oklahoma Medical Center	D W Branham						1	2	1	0	= 4		
University Hospitals		10		7	3	1,983						200 250	PM
Veterans Admin		23	260	10	70	250							
OREGON													
Portland													
University of Oregon Medical School Hospitals and Clinics	C V Hodges	64	1,320	44	70	3,242	2	2	2	2	= 8	165 215	FM
Veterans Admin	C V Hodges	33	484	19	79	910	0	0	2	0	= 2	271-412	PM
PENNSYLVANIA													
Danville													
George F Geisinger Memorial	W I Buchert	24	1,039	15	53	8 436	1	0	0	0	= 1	175 225	FM
Erie													
Hamot	R C Lyons	13	606	17	31	413	1	1	1	1	= 4	250 300	FM
St Vincent	V F Kaminsky	25	1 049	24	55	1 178	2*	1	1	0	= 4	275 375	FM
Harrisburg													
Harrisburg	R F Allyn		674	28	36	1 961	1	1	0	0	= 2	250-	FP
Philadelphia													
Albert Einstein Medical Center	M Muschat	61	1,331	35	51	970	2	1	0	0	= 3	125 200	FM
Episcopal	G D Shoup	15	377	9	56	897	1	1	0	0	= 2	150-150	FM
Graduate Hospital of the University of Pennsylvania [1]	H M Burros	5	257	4	75	1,870	1	1	1	0	= 3	100-100	FM
Mercy [1] (Wilkes Barre)	C Burns		263	2	50	970	1	0	0	0	= 1	300-300	FM
Hahnemann Medical College and Hospital	J M Howard	28	672	13	30	1 595	2	2	1	1	= 6	75 75	FM
Hospital of the University of Pennsylvania	B Hughes	30	1 025	20	60	2,507	1	1	1	0	= 3	200-400	PM
Jefferson Medical College	T R Fetter	54	1 361	31	53	5 117	1	1	2	1	= 5	100-150	PM
Pennsylvania	B Hayllar		448	10	50	2 385	2	0	0	0	= 2	20- 40	FM
Philadelphia General	J Gislason P Ieberman	22	922	31	52	3 717	2	2	1	0	= 5	128 265	FM
Temple University	K B Conger	20	928	21	62	2 082	1	1	1	0	= 3	175 275	PM
Veterans Admin	M Bogash	29	550	16	63		1	1	1	0	= 3	292-462	0
Pittsburgh													
Allegheny General	J L Hamilton	22	805	16	31	575	1	0	0	0	= 1	200-250	FM
Mercy	C C Altman	27	712	15	40	607	1	1	1	0	= 3	235-285	FM
Health Center Hospitals of the University of Pittsburgh School of Medicine													
Presbyterian-Woman's	J J Lee	18	567	13	54		1	1	1	1	= 4	125-175	FM
Veterans Admin	C A Kuehn	26	552	31	82		0	1	1	1	= 3	270-412	0
Sayre													
Robert Packer	W Baurys	17	1 007	14	42	879	1	0	0	0	= 1	235 325	PM
Wilkes-Barre													
Wilkes Barre General	W J Daw	15	566	20	55	838	0	1	0	0	= 1	225	
PUERTO RICO													
San Juan													
San Juan City	L Sanjurjo	19	325	5	80	5 509	0	1	1	0	= 2	250 375	FM
RHODE ISLAND													
Providence													
Rhode Island	E K Landsteiner	29	922	38	45	2 428	1	1	1	0	= 3	125-175	FM
SOUTH CAROLINA													
Charleston													
Teaching Hospitals of the Medical College of South Carolina	P W Sanders Jr	12	498	7		1 520						138 168	
Medical College													
Roper													
Orangeburg													
Orangeburg Regional	L P Thackston	40	1,628	14	86	10 226	0	1	1	0	= 2	200-500	FM
TENNESSEE													
Memphis													
City of Memphis Hospitals [16]	S L Raines		683	35	50	5 103	3	2	1	0	= 6	100-200	FP
Baptist Memorial [16-44]	W H Walker	46	824	21	90	2 595	1	1	1	0	= 3	271 347	PM
Veterans Admin													
Nashville													
George W Hubbard	D V Bradley	6	86			945	1	1	1	0	= 3	125-175	FM
Vanderbilt University	A P Harris	10	338	3	33	2 023	1	0	0	0	= 1	100-125	FM

Numerical and other references are listed on pages 811 through 814

30 UROLOGY—Continued

	Chief of Service or Program Director	Average Daily Census	Admissions (Include transfers)	Deaths: Number	Deaths: Autopsy Percent	Outpatient Visits	Residencies Offered 1961 1962: 1st Year	2nd Year	3rd Year	4th Year	Total All Yrs	Stipend Per Month: Min Max	1 Main 2 Mechanics 3 M O
TEXAS													
Dallas													
Parkland Memorial	H Spence	16	478	13	27	4 818	0	1	1	1	= 3	160 220	PM
Veterans Admin [33]	P A Duff	40	582	30	90	3 000	1	0	0	1	= 2	360-412	PM
Galveston													
University of Texas Medical Branch Hospitals	C Hooks	24	603	13	46	7 497	1	1	1	0	= 3	160 160	1 P
Houston													
Baylor University College of Medicine Affiliated Hospitals													
Jeffer on Davis	A Leader	19	482	19	36	6 42	1	1	1	0	= 3	120-160	PM
Methodist												100 170	PM
St Luke s Episcopal	J H Guthrie	41	2 297	14	48		2	0	0	0	= 2	120 120	PM
Texas Children s	J H Guthrie	7	690			28							
Veterans Admin	R Scott	37	960	16	88		2	2	2	0	= 6	270-412	PM
Hermann [34]	C M Crigler	32	1 854	15	60	9	1	1	1	1	= 4	120 200	PM
VERMONT													
Burlington													
University of Vermont Medical School Affiliated Hospitals													
DeGoesbriand Memorial	J R Powell	5	280#		50	1 1						208 208	
Mary Fletcher	J R Powell	9	438	9	48	81	1	0	0	0	= 1	160 186	TMO
VIRGINIA													
Charlottesville													
University of Virginia	A F Laquin	12	46	11	55	3 0.	2	0	0	1	= 3	150 150	PM
Danville													
Memorial	J R Landes	17	902	8	75	87	1	1	1	0	= 3	350 450	PM
Richmond													
Medical College of Virginia Hospital Division	A I Dodson Jr	34	789	18	28	2 732	1	1	1	0	= 3	120-170	TM
Veterans Admin	R C Bunt	3.	790	20	73	1 758	1	1	1	0	=	271-412	PM
WASHINGTON													
Seattle													
University of Washington Affiliated Hospitals													
King County Hospital Unit No 1 (Harborview) [17]	F S Ansell	16	533#	22	64	1 981	1	1	1	0	= 3	200 250	FM
University	F Ansell		107#			21	1	1	1	1	= 4	180 300	PM
Veterans Admin [1]	F S Ansell			11	100								
WISCONSIN													
Madison													
Madison General	P R Kundert	23	883	16	69		1	1	1	0	= 3	200-250	TP
University Hospitals	J B Weir	17	469	11	45	1 09.	2	1	1	1	= 5	100-200	FM
Milwaukee													
Milwaukee County	R S Irwin	56	1 15	32	56	2 956	1	1	1	1	= 4	229 434	
Veterans Admin (Wood)	R S Irwin	44	868	21	74	5 124	2	1	1	0	= 4	271 412	PM

Numerical and Other References

1 Appointments restricted to men only
2 U S Citizenship required
3 Appointments not available to graduates of foreign medical schools
4 Training at the third year level only
5 May include one year fellowships in the Department of Cardiology
6 May include one year of training at Cook County Hospital Chicago by special arrangement
7 May include one year of surgical research at Louisiana State University School of Medicine
8 Includes fellowships
9 Coordinated three year programs White Memorial Hospital affords two years General Hospital of Riverside County one year Residents should apply to White Memorial Hospital
10 In addition to three intramural years at Veterans Administration Hospital coordinated three-year program Touro Infirmary affords one year Veterans Administration Hospital final two years Residents should apply to Veterans Administration Hospital
11 Coordinated three year program Peter Bent Brigham Hospital affords 18 months Veterans Administration Hospital West Roxbury Mass 18 months Residents should apply to either hospital
12 In addition to three intramural years at Lincoln Hospital coordinated three year program Lincoln Hospital affords two years Hackensack Hospital one year Residents should apply to Lincoln Hospital
13 Approved Category I Residents interested should consult Requirements for Certification
14 Coordinated three year program St Vincent Hospital affords two years Maumee Valley Hospital one year Residents should apply to St Vincent s Hospital
15 In addition to three intramural years at Graduate Hospital of the University of Pennsylvania coordinated three year program Graduate Hospital affords two years final year at Mercy Hospital Residents should apply to Graduate Hospital
16 In addition to three intramural years at City of Memphis Hospitals coordinated three-year program City of Memphis Hospitals affords two years Baptist Memorial Hospital one year Residents should apply to City of Memphis Hospitals
17 In addition to three intramural years at King County Hospital Unit No 1 (Harborview) coordinated three year program King County Hospital affords two years final year at Veterans Administration Hospital Seattle Residents should apply to King County Hospital
18 Training limited to Contagious Diseases
19 In addition to three years in Internal Medicine one year of training in Hematology is available
20 Coordinated three year program Watts Hospital affords two years North Carolina Memorial Hospital affords one year Residents should apply to Watts Hospital
21 Combined integrated program—Bellevue Div II (Cornell and Memorial Cancer Center)
22 Training in pediatric psychiatry (third year level)
23 To include one year of affiliate training at the second year level at the University Hospitals (Lakeside) Cleveland
24 This one year of training is equivalent to one year of basic science as a part of an approved three year program
25 One year of clinical investigation available
26 An additional one year of fellowship training in cardio pulmonary laboratory is available
27 Includes one year of training at Veterans Administration Hospital Iowa City
28 Provides training at the third year level affiliate training with University of Minnesota Hospitals Minneapolis
29 Approved for affiliate training only
30 Obstetrical and Gynecological Pathology only
31 Coordinated three year program two years at King County Hospital Center one year at Brooklyn Hospital Residents should apply to Kings County Hospital Center
32 Approved Category P Residents interested should consult Requirements for Certification
33 La Rabida Sanitarium Lewis Memorial Maternity Hospital Municipal Contagious Disease Hospital St Joseph Hospital St Vincent s Hospital Chicago
34 Methodist Hospital and St Francis Hospital Divisions
35 Children's Hospital Los Angeles County Hospital Los Angeles
36 Six months of training is afforded at University Hospital Iowa City
37 In addition to the three year program at Bellevue Medical Center Division I another program has been approved for two years of training which includes rotation on the following services Columbia University Division and Medical Chest Service Bellevue Hospital Columbia Research Division Goldwater Memorial Hospital Medical Service Francis Delafield Hospital

38 Includes one year of training at Parkland Memorial Hospital Dallas, Texas
39 Approved for training at the first year level
40 Previous internship not required
41 Approved Category H Residents interested should consult Requirements for Certification
42 Approved Category I Residents interested should consult Requirements for Certification
43 Includes one year fellowship in the cardio pulmonary laboratory
44 Provides one year of training at third year level as part of three year program at City of Memphis Hospitals
45 Includes one year of training at State University of Iowa Hospitals Iowa City
46 One year of approved resident training in Pulmonary Diseases is offered at each the University of Kansas Medical Center Kansas City, Kansas and the Veterans Administration Hospital Kansas City, Mo
47 In addition to three intramural years at Sinai Hospital Baltimore coordinated three year program Sinai Hospital affords first two years, Fordham Hospital one year (third year) Residents should apply to Sinai Hospital
48 Coordinated three year program Bayonne Hospital and Dispensary affords two years, Jersey City Medical Center Jersey City one year Residents should apply to Bayonne Hospital and Dispensary
49 Coordinated three year program Beth Israel Hospital affords two years Lawrence F Quigley Memorial Hospital affords one year Residents should apply to Beth Israel Hospital
50 Joint program—West Jersey Hospital Cooper Hospital Our Lady of Lourdes Hospital Camden, N J
51 A second year of training available at Massachusetts General Hospital
52 In addition to a three year intramural residency a rotating residency which provides six months training on each of the following services Columbia University Division Bellevue Hospital Medical Chest Service Bellevue Hospital Columbia Research Division Goldwater Memorial Hospital, and Medical Service Francis Delafield Hospital is afforded
53 Coordinated three year program Massachusetts Memorial Hospital affords two years Lynn Hospital affords one year (second year) Residents should apply to Massachusetts Memorial Hospital
54 Combined three year program Two years afforded at Ancker Hospital one year afforded at Charles T Miller Hospital Residents should apply to Ancker Hospital
55 Combined program of Pediatrics and Contagious Diseases
56 Three year coordinated program all of which may be at Army Medical Center or Brooke General Hospital or may be two years at one of these plus a year at Fitzsimons General Hospital or Letterman General Hospital
57 Duration of complete program greater than 36 months Entire program of more than 36 months must be completed in order to obtain three years of obstetrics and gynecology
58 Program offers a year or more of additional training in the specialty beyond the basic two years required to fulfill the residency requirement of the Board
59 Emory University Affiliated Hospitals Atlanta Ga
76 Medical College of Alabama Hospitals Birmingham Alabama
77 University of Arkansas Medical Center Little Rock Ark
78 Valley Children's Hospital Fresno, Calif
79 Veterans Administration Mental Hygiene Clinic Los Angeles
80 Harbor General Hospital Torrance Calif
81 Memorial Hospital of Long Beach Calif Children's Hospital Los Angeles
82 Los Angeles County Hospital Los Angeles
83 John Wesley County Hospital Los Angeles
84 Children's Hospital Los Angeles Eye and Ear Hospital Los Angeles
85 Hospital of the Good Samaritan, Children's Hospital Los Angeles
86 University of California Hospital Los Angeles
87 Cedars of Lebanon Hospital Los Angeles Harbor General Hospital Torrance Calif
88 Children's Hospital Los Angeles St John's Hospital Santa Monica Calif
89 Veterans Administration Hospital San Fernando Calif
90 Glendale Sanitarium and Hospital Glendale Calif
91 Glendale Sanitarium and Hospital Glendale Calif Olive View Sanatorium and Hospital Olive View Calif
92 Glendale Sanitarium and Hospital Glendale Calif Rancho Los Amigos Hospital Hondo Calif
93 Rancho Los Amigos Hospital Hondo Calif
94 Children's Hospital, Los Angeles
95 Samuel Merritt Hospital Oakland Calif
96 Santa Barbara General Hospital Santa Barbara Calif
97 University of Southern California Los Angeles
98 San Francisco General Hospital San Francisco
99 Sacramento County Hospital Sacramento Calif San Francisco General Hospital Southern Pacific Hospital San Francisco Santa Clara County Hospital San Jose Calif
100 Southern Pacific Hospital San Francisco Veterans Administration Hospital Ft Miley Calif
101 San Francisco General Hospital San Francisco Mills Memorial Hospital San Mateo Calif
102 Franklin Hospital San Francisco General Hospital San Francisco
103 San Francisco General Hospital Veterans Administration Hospital San Francisco
104 St Luke's Hospital, San Francisco
105 University of California Hospitals San Francisco
106 Langley Porter Neuropsychiatric Institute, San Francisco San Joaquin County Mental Health Clinic Stockton, Calif
107 Langley Porter Neuropsychiatric Institute San Francisco
108 Veterans Administration Hospital University of Colorado Medical Center Denver
109 St Luke's Hospital, Denver
110 Colorado State Hospital Pueblo Colorado
111 Children's Hospital Denver
112 University of Colorado Medical Center Denver
113 St Joseph's Hospital Denver
114 Penrose Cancer Hospital Colorado Springs, Colo
115 St Joseph's Hospital Denver Parkview Hospital Pueblo Colo
116 St Mary Corwin Hospital Pueblo, Colorado
117 St Mary Corwin Hospital, Pueblo Colorado St Joseph's Hospital Denver
118 Memorial Hospital for Cancer and Allied Diseases New York City
119 John J McCook Hospital Hartford, Conn
120 John J McCook Hospital Hartford Conn Memorial Hospital for Cancer and Allied Diseases New York City
121 Laurel Heights Hospital, Shelton, Conn
122 Grace New Haven Community Hospital New Haven Conn
123 Norfolk Community Hospital Norfolk Va Soldiers Home Hospital Chelsea Mass
124 District of Columbia General Hospital Washington, D C U S Public Health Service Hospital Staten Island, N Y Norfolk Community Hospital, Norfolk, Va
125 District of Columbia General Hospital Washington D C
126 District of Columbia General Hospital, Washington D C St Mary's Hospital Rochester N Y Arlington Hospital, Arlington Va
127 District of Columbia General Hospital Veterans Administration Hospital Washington, D C
128 Armed Forces Institute of Pathology, Washington D C
129 District of Columbia General Hospital Veterans Administration Hospital Washington, D C
130 Walter Reed Army Hospital, Washington D C
131 Armed Forces Institute of Pathology Children's Hospital District of Columbia General Hospital St Elizabeth's Hospital Washington D C
132 District of Columbia General Hospital, St Elizabeth's Hospital Veterans Administration Hospital Washington D C
133 Armed Forces Institute of Pathology, Georgetown Univ Hospital Washington, D C
134 Georgetown University Hospital Washington D C
135 George Washington University Hospital Washington, D C
136 Georgetown University Hospital George Washington University Hospital Naval Medical Center Walter Reed Army Hospital Children's Hospital Washington, D C
137 Georgetown University Hospital George Washington University Hospital, Naval Medical Center Washington D C
138 District of Columbia General Hospital Children's Hospital Washington D C
139 Children's Hospital Washington D C
140 Duval Medical Center Jacksonville Fla
141 Brewster Hospital Jacksonville, Fla Memorial Hospital for Cancer and Allied Diseases New York City
142 Mount Sinai Hospital Miami Heart Institute Miami, Fla
143 Veterans Administration Hospital Coral Gables Fla
144 Veterans Administration Hospital Coral Gables, Fla Kendall Hospital South Miami Fla
145 Jackson Memorial Hospital Miami Fla
146 Cincinnati General Hospital, Cincinnati
147 Grady Memorial Hospital Emory University Hospital, Atlanta Ga
148 Grady Memorial Hospital Atlanta Ga
149 Eugene Talmadge Memorial Hospital Augusta Ga
150 Veterans Administration Hospital, Atlanta Ga
151 Cook County Hospital, Chicago
152 Veterans Administration Hospital Hines, Ill
153 Lewis Memorial Hospital, Chicago
154 Municipal Tuberculosis Sanitarium, Chicago
155 Veterans Administration Hospital (West Side), Chicago
156 Chicago State Hospital, Chicago
157 Cook County Hospital Mount Sinai Hospital Chicago
158 University of Illinois Research and Education Hospital Michael Reese Hospital Chicago
159 Veterans Administration Hospital, Hines, Ill Henrotin Hospital Presbyterian St Luke's Hospital, Chicago
160 Veterans Administration Hospital Hines Ill
161 University of Illinois Research and Education Hospital, Chicago
162 Cook County Hospital Mount Sinai Hospital Presbyterian St Luke's Hospital Chicago
163 Illinois Eye & Ear Infirmary, Chicago
164 Passavant Memorial Hospital, Chicago
165 Children's Memorial Hospital, Chicago Methodist Hospital Peoria Ill
166 Methodist Hospital, Peoria, Ill
167 Silver Cross Hospital Joliet, Ill
168 Children's Memorial Hospital, Chicago
169 Veterans Administration Hospital Indianapolis Ind
170 Methodist Hospital Indianapolis Ind
171 Broadlawns Polk County Hospital Des Moines Ia
172 In addition to a program of three intramural years at University Hospitals a separate three year program of two years at University Hospitals and one year at Veterans Administration Hospital is afforded
173 Veterans Administration Mental Hygiene Clinic Children's Service of the Menninger Clinic Topeka, Kan
174 University of Kansas Medical Center Kansas City Kan
175 Good Samaritan Hospital Lexington Ky
176 Final year of the 4 year program at Ochsner Foundation Hospital New Orleans
177 Charity Hospital Veterans Administration Hospital, New Orleans
178 E A Conway Memorial Hospital Monroe La
179 Crippled Children's Hospital, Charity Hospital (Tulane Service) New Orleans E A Conway Memorial Hospital Monroe, La
180 E A Conway Memorial Hospital Monroe La Huey P Long Charity Hospital Pineville, La
181 Charity Hospital of Louisiana (Louisiana State University Unit) New Orleans
182 Charity Hospital of Louisiana New Orleans
183 Charity Hospital (Tulane Service) Eye Ear Nose and Throat Hospital New Orleans
184 Touro Infirmary, New Orleans
185 Boston Floating Hospital Boston
186 University Hospital Baltimore
187 Johns Hopkins Hospital Baltimore
188 Six months affiliated training afforded at University Hospital Baltimore Md
189 Johns Hopkins Hospital University Hospital Baltimore
190 Beth Israel Hospital Boston

191 Chelsea Soldier's Home Chelsea Mass Boston State Hospital Mattapan Pondville State Hospital Walpole Mass
192 Labey Clinic Boston
193 Soldiers Home Chelsea Mass
194 Beth Israel Hospital, Boston Beverly Hospital Beverly Mass Mount Auburn Hospital Cambridge Mass North Shore Babies Hospital Salem Hospital Salem Mass Wrentham State Hospital Wrentham Mass
195 Children's Hospital Medical Center Boston
196 Boston City Hospital Children's Medical Center Boston
197 Children's Hospital Boston Veterans Administration Hospital West Roxbury Mass
198 Veterans Administration Hospital West Roxbury Mass
199 Pondville Hospital Walpole Mass
200 Carney Hospital St Elizabeth Hospital Boston Beth Israel Hospital Brookline Mass Newton Wellesley Hospital Newton Lower Falls Mass
201 Lemuel Shattuck Hospital Boston Newton Wellesley Hospital Newton Lower Falls Mass
202 Faulkner Hospital Boston
203 Lemuel Shattuck Hospital Massachusetts General Hospital Boston
204 Massachusetts General Hospital Boston
205 Newport Hospital Newport R I
206 Boston City Hospital Boston
207 Six to twelve months affiliated training at Pondville Hospital Walpole Mass
208 Veterans Administration Hospital Ann Arbor Michigan
209 Community Hospital Battle Creek Michigan
210 Children's Hospital Detroit Receiving Hospital Detroit Wayne County General Hospital Eloise Mich
211 Children's Hospital Women's Hospital Detroit
212 Children's Hospital Detroit
213 Detroit Orthopedic Clinic Detroit
214 University Hospital Ann Arbor Mich
215 Lafayette Clinic Detroit
216 Veterans Administration Hospital Minneapolis
217 Shriners Hospital for Crippled Children Minneapolis
218 Veterans Administration Hospital Minneapolis General Hospital Minneapolis Ancker Hospital St Paul Minn
219 Veterans Administration Hospital Minneapolis
220 University of Minnesota Hospital Minneapolis Ancker Hospital St Paul Minn
221 University of Minnesota Hospitals Minneapolis
222 Rochester Methodist Hospital St Mary's Hospital Rochester Minn
223 Child Guidance Clinic Jackson Miss
224 Veterans Administration Hospital Gulfport Miss
225 Kuhn Memorial Hospital Vicksburg Miss
226 Children's Mercy Hospital Kansas City Mo
227 Boston City Hospital Boston Bellevue Medical Center New York City
228 Koch Hospital Koch Mo Barnes Hospital Veterans Administration Hospital St Louis Mo
229 St Louis Maternity Hospital St Mary's Hospital St Louis Mo
230 Cardinal Glennon Hospital St Louis Mo
231 Renard Hospital St Louis State Hospital St Louis Mo
232 Cardinal Glennon Hospital St Mary's Hospital St Louis Mo
233 Barnes Hospital St John's Hospital St Louis State Hospital St Louis Mo
234 St Luke's Hospital St Louis Mo
235 St Louis City Hospital St Mary's Group of Hospitals St Louis Mo
236 Ellis Fischel State Cancer Hospital Columbia Mo Cardinal Glennon Memorial Hospital St Louis Mo
237 St Louis City Hospital St Louis Mo
238 Douglas County Hospital Nebraska Methodist Hospital Bishop Clarkson Memorial Hospital Omaha Neb
239 University of Nebraska Hospital Omaha Neb
240 St Joseph's Hospital University of Nebraska Hospital Omaha Neb
241 Nebraska Methodist Hospital University of Nebraska Hospital Omaha Neb
242 St Joseph's Hospital Omaha Neb
243 Jefferson Medical College Hospital Philadelphia
244 Includes one year of training at Montefiore Hospital New York City
245 Flower and Fifth Avenue Hospitals Metropolitan Medical Center New York City
246 St Christopher's Hospital for Children Philadelphia
247 Children's Hospital Philadelphia
248 Veterans Administration Hospital Albany N Y
249 Anthony N Brady Memorial Hospital Albany N Y
250 Children's Hospital Veteran Administration Hospital Buffalo N Y
251 Children's Hospital Roswell Park Memorial Hospital Buffalo N Y
252 Children's Hospital Buffalo N Y
253 Roswell Park Memorial Hospital Buffalo N Y
254 Buffalo General Hospital Children's Hospital Buffalo N Y
255 Roswell Park Memorial Hospital Sisters of Charity Hospital Buffalo N Y
256 Buffalo Eye & Ear Hospital Buffalo N Y
257 Millard Fillmore Hospital Roswell Park Memorial Hospital Buffalo N Y
258 Includes one year affiliated training at Georgetown University Hospital Washington D C
259 Buffalo General Hospital Children's Hospital Buffalo N Y I N Adam Memorial Hospital Perrysburg N Y
260 Buffalo General Hospital Edward J Meyer Memorial Hospital Millard Fillmore Hospital Buffalo N Y
261 Presbyterian Hospital New York City
262 Memorial Hospital New York Hospital New York City
263 Triboro Hospital Jamaica N Y North Shore Hospital Manhasset N Y
264 New York Hospital New York City
265 Knickerbocker Hospital University Hospital New York City
266 Goldwater Memorial Hospital Institute of Physical Medicine and Rehabilitation Hospital for Joint Diseases St Vincent's Hospital University Hospital Veterans Administration Hospital (Manhattan) New York City Grasslands Hospital Valhalla N Y New York State Rehabilitation Hospital West Haverstraw New York
267 University Hospital New York City
268 University Hospital Veterans Administration Hospital (Manhattan) New York City
269 Knickbocker Hospital University Hospital, Veterans Administration Hospital (Manhattan) New York City
270 Central Islip State Hospital Central Islip N Y University Hospital Veterans Administration Hospital (Manhattan) New York City
271 Meadowbrook Hospital Hempstead N Y University Hospital Veterans Administration Hospital (Manhattan) New York City
272 Mount Sinai Hospital New York City
273 Bellevue Medical Center New York City
274 Kings County Hospital Center New York City (Brooklyn)
275 Hospital for Joint Diseases New York City
276 Triboro Hospital Jamaica N Y
277 Queen Hospital Center Jamaica N Y
278 New York Hospital Cornell Medical Center New York City
279 One year of affiliated training provided on a continuing basis at Beekman Downtown Hospital or Jewish Hospital of Brooklyn
280 Long Island College Hospital Maimonides Hospital (Brooklyn) New York City
281 Long Island College Hospital (Brooklyn) New York City
282 St John's Episcopal Hospital New York City (Brooklyn)
283 Veterans Administration Hospital (Brooklyn), New York City
284 Montefiore Hospital New York City
285 Morrisania City Hospital New York City
286 Margaret Hague Hospital Jersey City, N J
287 Columbia Presbyterian Medical Center New York City
288 Francis Delafield Hospital Goldwater Memorial Hospital New York City
289 New York State Psychiatric Institute New York City
290 Bronx Municipal Hospital New York City
291 Jewish Hospital Maimonides Hospital (Brooklyn) New York City
292 Meadowbrook Hospital Hempstead N Y Bellevue Hospital New York City
293 Bellevue Hospital Presbyterian (Babies) Hospital New York City
294 Beekman Downtown Hospital Memorial Center Presbyterian Hospital St Luke's Hospital (Womens Division) New York City
295 Lenox Hill Hospital New York City
296 New York University Medical Center New York City
297 Children's Hospital Buffalo N Y Strong Memorial Hospital Rochester N Y
298 Genesee Hospital Rochester N Y
299 Genesee Hospital Highland Hospital Rochester N Y
300 Veterans Administration Hospital Durham N C
301 Lincoln Hospital North Carolina Cerebral Palsy Hospital Watts Hospital Durham N C
302 Duke Hospital Durham N C
303 Veterans Administration Hospital Cincinnati Ohio
304 Longview State Hospital Cincinnati Ohio
305 Children's Hospital Cincinnati Ohio
306 St Vincent's Charity Hospital Cleveland
307 Cleveland Metropolitan General Hospital Cleveland
308 University Hospitals Cleveland
309 Cleveland Guidance Center Cleveland
310 Veterans Administration Hospital Brecksville Ohio Cleveland Metropolitan General Hospital University Hospital Cleveland
311 Veterans Administration Hospital Brecksville Ohio, University Hospitals Cleveland
312 Veterans Administration Hospital Brecksville Ohio Sunny Acres Cuyahoga County Tuberculosis Hospital Cleveland General Hospital Mount Sinai Hospital Cleveland
313 St Ann's Hospital for Women Columbus Ohio
314 Veterans Administration Hospital Dayton Ohio
315 Miami Valley Hospital Dayton Ohio
316 Ohio State University Hospitals Columbus Ohio
317 Veterans Administration Hospital Oklahoma City
318 Central State Hospital Norman Okla
319 St Anthony's Hospital Oklahoma City
320 Wesley Hospital Oklahoma City
321 Wesley Hospital Oklahoma City St John's Hospital Tulsa Okla
322 Central State Hospital Norman Okla Mercy Hospital Oklahoma City St John's Hospital Tulsa Okla
323 Veterans Administration Hospital Portland Ore
324 Shriners Hospital for Crippled Children, Spokane Wash
325 Norristown State Hospital Norristown Pa
326 Eastern Pennsylvania Psychiatric Institute Philadelphia Children's Service Center of Wyoming Valley Hospital Wilkes Barre Pa
327 Allegheny General Hospital Pittsburgh
328 Children's Hospital Pennsylvania Hospital Philadelphia
329 Lankenau Hospital Philadelphia
330 Our Lady of Lourdes Camden N J Lankenau Hospital Philadelphia
331 Philadelphia General Hospital Philadelphia
332 St Luke's and Children's Medical Center Philadelphia
333 Monmouth Medical Center Long Branch N J Lancaster General Hospital Lancaster Pa Philadelphia General Hospital Philadelphia
334 Veterans Administration Hospital Philadelphia
335 Episcopal Hospital Philadelphia
336 Veterans Administration Hospital Coatesville Pa Fitzgerald Mercy Hospital Darby Pa St Christopher's Hospital for Children Philadelphia
337 St Christopher's Hospital for Children Philadelphia
338 Eastern Pennsylvania Psychiatric Institute Philadelphia Carrier Clinic Belle Mead N J
339 Allegheny General Hospital Children's Hospital University of Pittsburgh Medical Center Philadelphia
340 University of Pittsburgh Medical Center Pittsburgh
341 Western Psychiatric Institute Pittsburgh
342 Allegheny General Hospital Children's Hospital Pittsburgh
343 San Juan City Hospital San Juan P R
344 Clinica Dr F Fernandez Garcia Clinica Dr M Julia San Juan P R Veterans Administration Hospital New York (Bronx) N Y
345 San Juan City Hospital Dr I Gonzalez Martinez Oncologic Hospital San Juan P R
346 Boston City Hospital Boston
347 East Tennessee Children's Hospital Knoxville Tenn
348 East Tennessee Tuberculosis Hospital Knoxville Tenn

349 John Gaston Hospital Hospital for Crippled Adults Crippled Children s Hospital Memphis Tenn
350 Memphis Eye Ear Nose and Throat Hospital Memphis Tenn
351 City of Memphis Hospitals Memphis, Tenn
352 John Gaston Hospital Memphis Tenn
353 Jackson Madison County Hospital Jackson, Tenn Cancer Clinic Memphis
354 Lahey Clinic Boston John Gaston Hospital Memphis
355 Arkansas Children s Home and Hospital, Little Rock Ark
356 John Andrew Memorial Hospital Tuskegee Ala
357 Nashville General Hospital Nashville Tenn
358 Vanderbilt University Hospital Nashville, Tenn
359 Parkland Memorial Hospital Dallas Tex
360 Children s Medical Center Parkland Memorial Hospital Dallas Texas
361 Carrie Tingley Hospital for Crippled Children Truth or Consequences N M
362 Baylor University Hospital Children s Medical Center, Parkland Memorial Hospital Dallas Texas
363 Children s Medical Center Gaston Hospital, Parkland Memorial Hospital Dallas Texas
364 Baylor University Hospital Parkland Memorial Hospital Dallas Texas
365 Jefferson Davis Hospital Methodist Hospital, Texas Children s Hospital Veterans Administration Hospital Houston Texas
366 M D Anderson Hospital for Cancer Research Southern Pacific Hospital, Houston Texas
367 University of Texas M D Anderson Hospital and Tumor Institute Houston Texas
368 University of Texas Medical Branch Hospitals Galveston Texas
369 Veterans Administration Hospital Temple Texas
370 Los Angeles Tumor Institute Los Angeles
371 Thomas D Dee Memorial Hospital Ogden Utah, Holy Cross Hospital, St Marks Hospital Salt Lake County General Hospital Veterans Administration Hospital Salt Lake City
372 Boston Lying In Hospital Boston
373 University of Virginia Hospital, Charlottesville, Va Lynchburg General Hospital Lynchburg Va
374 Medical College of Virginia Hospital Division Richmond, Va
375 University Hospital Seattle
376 Children's Orthopedic Hospital Seattle
377 University of Washington Affiliated Hospitals Seattle
378 Madison General Hospital Madison Wis
379 Veterans Administration Hospital, Madison, Wis
380 Milwaukee County General Hospital Milwaukee
381 Milwaukee Children s Hospital Milwaukee Veterans Administration Hospital Milwaukee (Wood)
382 Milwaukee Children s Hospital Milwaukee
383 Milwaukee Hospital Milwaukee
384 Martha Washington Hospital Milwaukee County Hospital, Milwaukee
385 Wisconsin General Hospital Madison Wis Milwaukee Children s Hospital Milwaukee Veterans Administration Hospital Milwaukee (Wood)
386 House of Good Shepherd Mount Sinai Hospital Milwaukee
387 Milwaukee County Blood Center Milwaukee Veterans Administration Hospital Milwaukee (Wood)
388 Milwaukee Children's Hospital Milwaukee County General Hospital Milwaukee
389 University of California Hospital San Francisco
390 Columbia Hospital Milwaukee County General Hospital Milwaukee
391 Veterans Administration Hospital St Louis Mo

The Educational Council for Foreign Medical Graduates

Planned in 1955 and 1956 and established in 1957, the ECFMG has grown rapidly and is already beginning to fulfill the functions set up for it by its four sponsoring agencies, the American Hospital Association, the American Medical Association, the Association of the American Medical Colleges, and the Federation of State Medical Boards of the United States

Its chief purposes are (1) to provide information to foreign medical graduates seeking graduate training as interns or residents in United States hospitals, (2) to provide foreign medical graduates while still in their own countries with an opportunity to establish their qualifications for assuming intern or resident positions in U S hospitals

The Problem of Language Difficulty

Since no foreign medical graduate can serve effectively as an intern or resident in a U S hospital without a satisfactory command of English, the ECFMG English Test has been included, from the first, as a part of each American Medical Qualification Examination Foreign medical graduates who consider themselves not yet capable of passing this test will obviously defer application until their command of English is such as to enable them to listen to the twice-reading in English of a typical medical history in the words of the patient followed by the summarizing in English of the main points of that history as one would record it in a hospital medical chart

Foreign medical graduates whose entire training has been in English, such as graduates of the schools of the United Kingdom, India, and the Philippines have little or no difficulty with the English Test

This problem of language appears to be a particularly important one for those candidates taking the test in Turkey, Iran, Spain, Peru, and Thailand

The Problem Created by Lack of Experience with Multiple Choice Examinations

Though the ECFMG places in the hands of each candidate its Examination Brochure, explaining, describing, and giving examples of each of the four types of multiple-choice questions used in its American Medical Qualification Examination, candidates not infrequently complain that the hazards of the multiple-choice method of examining worried them more than did the deficiencies in their knowledge of the subject matter

This complaint is understandable and probably has some basis in fact It should be pointed out, however, that the multiple-choice objective-type, machine-scored examination with its 360 questions

The above statement was taken largely from the Annual Report of the ECFMG

makes it possible to sample the knowledge in medicine, surgery, pediatrics, obstetrics and gynecology and the medical basic sciences all in one day, that it enables the ECFMG to hold the examination on the same day in 100 or more examination centers around the world, twice each year and have the scores accurately and objectively determined within five weeks after each examination, that it enables the ECFMG to notify all candidates of their accomplishment in the examination in the fifth week after the examination

The advantages of this objective type of examination are so essential to the ECFMG certification plan that it could be said that without this objective machine-scoring mechanism it would not be feasible to operate the ECFMG certification plan at all

Lest the impression be given that unfamiliarity with multiple-choice questions is too serious a stumbling block, it should be recorded, however, that the graduates of certain schools in Europe, the Middle East and the Far East do very well indeed in our American Medical Qualification Examination, though in their training in their own country they have included little or no experience with the multiple-choice question

The Problem of the Graduates of Unrecognized Medical Schools

There are listed in the *1957 World Directory of Medical Schools* as published by the World Health Organization 533 medical schools outside the United States Several of these schools are quite limited in staff and facilities and their graduates are not recommended for full registration as physicians in the general practice of medicine without further medical training The graduates of all these schools are, however considered eligible for admission to our American Medical Qualification Examination provided they have had at least 18 years of formal education

On the other hand, there are schools for training native practitioners in Korea, China, India, and many other countries that make no claim of meeting modern standards of scientific medical education When such schools, as the Ayurvedic, Tibi-Unani, or Homeopathic schools of India incorporate sufficient modern, scientific medicine in their curriculum to merit the approval of the Medical Council of India and win a listing in the WHO World Directory of Medical Schools, the ECFMG can consider their graduates for admission to its American Medical Qualification Examination Until such time, however, their graduates will perforce have to be excluded as failing to meet the ECFMG basic requirement for graduation from and at least four credit years in a "recognized medical school'

Graduates of American osteopathic or chiropractic schools who apply for admission to the American Medical Qualification Examination upon the basis of a diploma won from a recognized foreign medical school after only one or two years of work there because of advanced credit granted for the work previously done in the American osteopathic or chiropractic schools, are not considered eligible They too fail to meet the basic requirement of at least four credit years in a 'recognized medical school'

The Problem of Orientation of the Foreign Medical Graduate

The training in medicine varies considerably among the 3,300 foreign medical graduates coming each year into our internship and residency training program

Some have had the advantage of a considerable amount of bedside small-group instruction and have had an opportunity to develop reasonable proficiency in auscultation, blood-pressure determination, blood counting, intravenous injections, spinal punctures, and the like Others have had almost entirely lecture-room and textbook instruction in large classes and have had little if any opportunity to develop skills, and to 'learn by doing" under close supervision For the latter group an orientation course varying in length and content with the needs of the individual is definitely indicated Aseptic technique, injection procedures, laboratory values, draping procedures essential in physical examination, the prescribing and administration of the commonly used antibiotics, and immunizing inoculations may all require reviewing, and the 'orientation course' may require, in some instances, several months

In those instances in which the command of English is a serious handicap the local public school system in many of the large cities has been able to offer significant help in providing practice and instruction ofttimes in the hospital setting

In charge of the orientation course is frequently the Director of Medical Education in the hospital Basic to his efforts is the establishment of the understanding that the first objective of the hospital must be service to patients, that teaching in the hospital, though important, must of necessity take second place to the service function, that comparatively little of the teaching will be formal or didactic, much of it will take the form of rounds, bedside instruction, and small-group conferences

Many Directors of Medical Education have found it helpful to encourage their interns and residents to keep an individual record book in which they set down the specific facts they learn day by day about the various diseases, tests, techniques, and dosages This self-compiled record book, if properly indexed, has often proved very useful for review and ready reference both in the hospital and later in practice outside the hospital

Foreign medical graduates who are working as residents in the various specialty fields such as

radiology, pathology, psychiatry, preventive medicine, and others often find it difficult to find the time required to properly prepare for the American Medical Qualification Examination by making a review of a modern text in each of the clinical subjects of medicine, surgery, pediatrics, and obstetrics and gynecology This review is essential since approximately 35% of the A M Q Examination questions come from medicine, 25% from surgery, 15% from pediatrics, 15% from obstetrics and gynecology Though only 10% of the questions come directly from the basic sciences, it is also true that the key to many of the clinical questions lies in the basic sciences Some hospitals have found that specially designed review courses serve admirably to give motivation, incentive, and a practical means of accomplishing this essential review

A Look Ahead

It would appear that

1 The knowledge of and acceptance of the ECFMG plan of certifying foreign medical graduates for internship and residency appointments in U S hospitals is expanding world-wide at a satisfactory rate, and will continue to do so

2 Between 50% and 60% of foreign medical graduates taking the American Medical Qualification Examination abroad will continue to qualify for internships and residencies in U S hospitals

The Over-All Results

As of Aug 15, 1960, the credentials of over 20,000 foreign medical graduates have been evaluated and 12,011 of these graduates have taken the Council's American Medical Qualification Examination Of the 12,011 foreign graduates taking the American Medical Qualification Examination, 7,473 (62 2%) have qualified, with scores of 70% or above

Standard ECFMG Certificates, based on scores of 75% or above, have been issued to 4,705 candidates Temporary (two-year) Certificates, based on scores of from 70% to 74% have been issued to 2,768 candidates

Preliminary figures indicate a registration for the Sept 21, 1960, examination of approximately 10,000 The next examination will be given on April 4, 1961 Admission to the examination will be granted only to candidates who have had their credentials evaluated and approved, and who have completed registration by the deadline date of January 4, 1961 Examinations are given in 47 examination centers in the United States and Canada and in 58 foreign centers The address of the Educational Council for Foreign Medical Graduates is 1710 Orrington Ave, Evanston, Ill

Special Announcements and Notices

Financial Assistance for Graduate Training in Medicine

It has been six years since the Association of American Medical Colleges last compiled information on the above subject under the title 'Fellowships, Funds and Prizes Available for Graduate Medical Work in the United States and Canada' A new publication entitled "Financial Assistance for Graduate Training in Medicine" is now available at a cost of $2 50 per copy from the Association of American Medical Colleges, 2530 Ridge Ave, Evanston, Ill There has been no compilation of information on loans from banks and similar organizations, since these are usually individually arranged on a basis of many local considerations

National Intern Matching Program and the Foreign Medical Graduate

At the spring 1960 meeting of the Board of Directors of the National Intern Matching Program, it was voted unanimously by representatives of all participating groups that the academic year from 1961 to 1962 would be the last year for which participating hospitals would be permitted to offer internship appointments to foreign medical graduates who do not participate in the Matching Program

For appointments beginning from 1962 to 1963 and thereafter, foreign graduates will be required to compete for internships on the same basis as U S and Canadian graduates, and member hospitals will no longer be free to offer them direct appointments during times covered by matching program dates In other words, the appointment of foreign graduates to internships in NIMP member hospitals will be covered by the same rules and dates that have always applied to U S and Canadian graduates After completion of the March matching, member hospitals will be free to fill remaining internship vacancies by the appointment of graduates of foreign medical schools as well as those of the United States and Canada By that time it is anticipated that there should be no foreign medical graduates in this country or planning to come to this country who have not secured certi-

fication from the Educational Council for Foreign Medical Graduates A foreign medical graduate may not participate in the NIMP unless he is certified by ECFMG

Requirements for American Specialty Board Certification

Attention is called to the fact that various announcements have been made in the past two years about the changing requirements for certain of the Specialty Boards These are included in detail in the special section of this issue containing the qualification requirements of each Board which section appears in the bound volumes of the Directory and is available as a separate reprint The significant items are emphasized below

Forensic Pathology—The Council on Medical Education and Hospitals, in concurrence with the American Board of Pathology is now accepting applications for provisional approval of residencies in Forensic Pathology Such approval can be given on the basis of data submitted by the institution requesting approval, full approval to be considered on the basis of later visit and review

The requirements for approval of one year of training in forensic pathology, in addition to the general requirements set out in the Essentials of Approved Residencies are

> Minimum 150 medico-legal autopsies annually, of which 25 or more are on bodies of persons known or suspected to have died by homicide Laboratory facilities for the usual medical problems of anatomic and clinical pathology In addition, closely affiliated laboratory facilities and personnel for studies in photography, toxicology, general police science, bacteriology, immunology, etc, as applied directly in forensic pathology It is highly desirable that the director of the training program be a legally constituted medical examiner or the equivalent The program should include formal lectures, seminars, conferences preceptorship type training, and an adequate library

Requests for information forms should be addressed to the Council on Medical Education and Hospitals, 535 N Dearborn St, Chicago 10, Ill

Internal Medicine—At the request of the American Board of Internal Medicine, the Council on Medical Education and Hospitals has agreed to discontinue approving residency training programs in the four subspecialties of internal medicine The corresponding subspecialty boards are not discontinuing certification in these subspecialties however, and the requirements for subspecialty certification will be found published in detail in the appropriate section of this issue Note that candidates are not eligible for admission to examination in a subspecialty until three years after certification in internal medicine New applications for approval of residency training programs in the subspecialties will no longer be accepted Currently approved residency programs in the subspecialties may affiliate with general medical residencies provided they wish to have their training programs identified in that manner

Obstetrics and Gynecology—Announcement was carried in THE JOURNAL, Nov 7, 1959, describing the policies and procedures of the Residency Review Committee for Obstetrics and Gynecology Special attention was called to the fact that, beginning July 1, 1962, there would no longer be approval for one-year programs in obstetrics and/or gynecology, two-year programs in obstetrics and/or gynecology, or two-year programs in gynecology only and in obstetrics only Institutions having such partially approved programs must thereafter either qualify for fully approved programs of three or more years duration or affiliate with programs providing complete training in the specialty A minimum of 18 months in obstetrics and 18 months in gynecology is a requirement

Orthopedic Surgery—After Jan 1, 1962, limited certification will be discontinued It is the policy of the Residency Review Committee that by that date hospitals will no longer be approved for training in adult orthopedics or fractures unless they can provide training in all branches of the specialty intramurally or through confirmed affiliations

Otolaryngology—After July 1, 1960, residencies shall be of four years duration, of which three must be progressive training in the specialty The four years must include one year in an approved residency in general surgery, preferably before the special training

Pediatrics—In addition to certification in pediatric allergy, the American Board of Pediatrics has established certification in pediatric cardiology as a subspecialty of pediatrics Information with regard to requirements for certification, application forms and training programs may be obtained from the Executive Secretary of the American Board of Pediatrics, 6 Cushman Rd, Rosemont, Pa

Psychiatry and Neurology—Subspecialty certification in child psychiatry is now being granted by the American Board of Psychiatry and Neurology

Radiology—In THE JOURNAL Oct 10, 1959, it

was announced that the Residency Review Committee for Radiology was approving residency training programs for three years in radiology, diagnostic roentgenology, or therapeutic radiology It was announced that further information would be published as developed by the Residency Review Committee This announcement was premature inasmuch as the Residency Review Committee has not yet developed the necessary specific information for those hospitals wishing to offer only special training in one or another of the above fields of radiology At the present moment then, programs are being approved only for three years in radiology, and must offer training in both diagnostic roentgenology and therapeutic radiology Subcommittees are presently working on revised requirements which, if acceptable to the Board and the Council, will become the basis for the new policy It is expected these new requirements will be developed during the next year, and appropriate announcement will be made not only in THE JOURNAL but individual notification will go to each hospital with a currently approved program

Eligibility of Foreign Medical Graduates—All specialty boards will now accept the foreign medical graduate under certain circumstances The different circumstances are quite variable, so all communications should be addressed to the board concerned and not to the Council

Changes in Listing Approved Residency Programs

Subspecialties of Internal Medicine—The lists of approved programs in the medical specialties of allergy, cardiovascular diseases, gastroenterology, and pulmonary diseases carry the captions that the programs listed are approved until June 30, 1961 They will not be listed in future directories The Board considers that candidates for subspecialty training are sufficiently mature to select their own types and locations for such training and expects that candidates and institutions can plan the kinds of programs needed after study of the requirements for qualification of candidates published elsewhere in this issue Further advice regarding subspecialty training must be secured by correspondence with the Secretary of the American Board of Internal Medicine

Child Psychiatry—The initial list of approved programs in child psychiatry is published in this issue

Revision of the Essentials of an Approved Internship

The Essentials of an Approved Internship are published in total in this issue of THE JOURNAL, including all revisions approved by the House of Delegates of the American Medical Association since Dec 5, 1958 The major change pertains to a clarification and elaboration of the content and conditions under which a mixed internship may be offered

Revision of the Essentials of Approved Residencies

The Essentials of Approved Residencies are likewise published in total in bound volumes of the Directory and as a separate reprint available upon request Minor or major changes have been made in the standards of training for the following specialties anesthesiology, dermatology, neurological surgery, obstetrics and gynecology, otolaryngology, pathology, pediatrics, physical medicine, plastic surgery, psychiatry and neurology, child psychiatry, and surgery

The section on internal medicine will be revised at a subsequent date to remove any reference to separate residency training in the subspecialties of allergy, cardiovascular diseases, gastroenterology, and pulmonary diseases other than as portions of residency programs in internal medicine

Appropriate sections on pediatric allergy, pediatric cardiology, and thoracic surgery are now undergoing development and revision

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INTERNSHIP IN RELATION TO LICENSURE—One year of internship, as a requirement for licensure, is required by 38 licensing boards Seven boards specify that the internship must be a rotating service, but only two boards specify the content of the rotating service In the majority of states, physicians serving internships are not required to be licensed in the state in which the internship is being served Thirty-two boards require that physicians serving as residents in those states must either be licensed or meet specific registration requirements Detailed information on requirements for licensure and annual statistics are presented in the State Board Number of THE JOURNAL Reprints of the data published in the State Board Number of May 28, 1960, are available in a pamphlet entitled "Medical Licensure Statistics—1959" Single copies of the reprint may be obtained from the Council on Medical Education and Hospitals, American Medical Association, 535 N Dearborn St, Chicago 10

ABSTRACTS FROM THE LITERATURE

Archives of Environmental Health

1 291-361 (Oct) 1960

*Cross Section of Industrial Worker Group
R E Birk p 291
*Pathological Changes Associated with Inhalation of Sodium Zirconium Lactate—J T Prior and others p 297
*Primary Irritant Nature of Cement
G E Morris p 301
*Research in Radioactive Contamination of Environment
C P Straub p 302
*Collection and Determination of Chromium in Urban Atmosphere—S M Belth and others p 311
*Chronic Ingestion by Dogs of Methyl Bromide Fumigated Food—I Rosenblum A A Stein and G Ensinger p 318
*Physiological Response to β Nitronaphthalene
J F Treon and F P Cleveland p 324
*Bronchial Mucous Glands in White South African Gold Miners—C B Chatzidakis p 335
Toxicity of Alkylamines
C H Hine and others p 343
*Chemical Cyanosis—Causes Effects and Prevention
J M Wetherhold A L Linch and R C Charshi p 353

Cross Section of Industrial Worker Group—This study was designed to determine if the diagnostic yield in examinations of an unselected supposedly well-patient population was high enough to warrant this type of survey A method of study was selected to allow the examiner the greatest latitude in selection of diagnostic studies and consultations Thus other than the initial chest x-ray blood count and urinalysis all further studies were based on the findings of a careful history and physical examination In 400 patients 1 279 diagnoses were made Of these diagnoses 101 required surgical correction and 844 necessitated definitive medical therapy The diagnostic yield of this study plus the low *average* cost and reasonable time per examination make this method one which may be an answer to the problems raised by the increased demand for periodic well patient examinations

Inhalation of Sodium Zirconium Lactate—Rabbits were exposed daily to mist concentrations of sodium zirconium lactate of approximately 0 049 per cubic centimeter of air over a 6 week period The exposure chamber had a capacity of 9,204 cubic centimeters and a number 15 DeVilbiss atomizer administered the mist at 5 minute intervals over a twenty minute period daily Significant pathological changes occurred in the lungs all animals developing either bronchiolar abscesses with a lobular type pneumonia or peri-bronchial granulomas The latter were composed of histiocytes without necrosis, giant cells or any tendency to encapsulate One extra pulmonary granuloma was produced in the tongue muscles Previous contact with this chemical did not intensify the pulmonary reaction The control animals were free from inflammatory or granulomatous changes

Primary Irritant Nature of Cement—Primary ulcers of the skin which were observed on the feet of 2 tunnel workers were due to the skin having been in contact with cement over long periods of time, thus evidencing the primary irritant nature of cement

Radioactive Contamination of the Environment—Radioactivity levels in a wide variety of environmental media collected in Cincinnati were reported These included gross and radionuclide activities in air water (including rainfall, snow, cistern, and surface waters), milk, and other food materials From these data, the daily intake of the most critical man-made radionuclide (strontium 90) was calculated It represented from 9 to 19 per cent of the maximum permissible daily intake of this radionuclide Similar studies should be made in other geographical areas and should include other radionuclides Epidemiological studies to develop control measures to minimize transfer of radioactive material from one phase of the ecosystem to another should be carried out in areas of high potential intake

Chromium in Urban Atmosphere—The purpose of this paper is to describe some air-borne chromium concentrations determined from a 1959 study of chromium in the air of Baltimore City and the test method used The range of CrO_3 found was from a background low of 0 11 mcg per cubic meter of air (mcg/m^3) to an average high of 1 71 mcg/m^3 The air volume per sample was approximately 0 7 cubic meter The test method permitted mass handling of atmospheric dust samples collected on filter paper tape (A I S I Smoke Sampler) The samples were ashed, fused with sodium peroxide and examined for chromium by the s-diphenylcarbazide method The color was read visually against standards The method is applicable from 0 to 10 mcg CrO per sample and will measure in excess of 0 2 mcg CrO_3 with an accuracy of 10-20%

Methyl Bromide-Fumigated Food—The broad purpose of this study was to determine the chronic effects in dogs of ingestion of additives (principally inorganic bromide) created by fumigation of pellets of Purina Dog Chow with methyl bromide Accordingly dogs were fed 150, 75, or 35 mg/kg/day of bromide in pellets fumigated with methyl bromide or 100 mg/kg/day of bromide as sodium bromide for a period of one year During this time observations were made of general appearance, blood chemistry and hematology Extensive morphological examination was also made at the end of the experiment An analysis of these various observations leads to the conclusion that only minimal evidence of bromide intoxication resulted from ingestion of either the fumigated dog pellets or the sodium bromide Lethargy and obesity was however noted in some dogs

Physiological Response to Beta Nitronaphthalene—The toxicity of beta-nitronaphthalene has been determined in animals (1) when it was administered orally both in a single dose and in repeated doses (2) when it was applied upon the intact and abraded skin as a single dose and repetitively, and (3) when it was inhaled as an air-borne material Oral administration of a *sufficiently* large dosage induced

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Periodicals on file in the Library of the American Medical Association may be borrowed by members of the Association or its student organization Requests for periodicals should be addressed Library American Medical Association Periodical files cover 1956 to date for English language and 1958 to date for foreign language journal No charge is made to members but the fee for others is 15 cent in stamps for each item Periodicals must not be kept longer than five days Periodicals published by the American Medical Association are not available for lending but can be supplied on purchase order Reprints as a rule are the property of authors and can be obtained for permanent possession only from them

Titles marked with an asterisk (*) are abstracted

slight methemoglobinemia, the formation of large numbers of Heinz bodies in the erythrocytes, considerable conjugation with sulfuric and glucuronic acids, and degenerative changes in the liver and kidneys Such changes were less noticeable when a dose that was one-tenth the oral LD_{50} was administered repetitively, these changes were not observed among animals exposed for 7 hours on each of 50 days over a period of 68 days to air that contained 1 91 mcg of beta-nitronaphthalene per liter

Bronchial Mucous Glands in Miners—A histological survey of the bronchial mucous glands of miners and a control group of nonmining white males of equivalent age was made In addition, the morphology of normal bronchi in white males and females, including persons dying of unnatural causes, was studied Enlarged bronchial mucous glands appeared to be commoner in the mining group, but as the miners are heavy smokers a group of nonsmoking miners in different stages of silicosis was examined It is suggestive that silicosis, *per se*, plays no part in the enlargement and excessive mucous secretion of these glands A survey showed no histochemical differences between the mucous in the bronchial glands of miners and nonminers

Chemical Cyanosis Causes, Effects, and Prevention—Simple and rapid procedures for the spectrophotometric microdetermination of methemoglobin and hemoglobin in 0 1 ml of whole blood by 2 unrelated methods has been applied successfully to the detection of exposure to cyanosis-producing aromatic nitro and amino compounds The differences between the acid hematin and oxidation procedures for hemoglobin have been related to the incidence of cyanosis and hemoglobin complexes which may be methemoglobin precursors The in vitro work of Jackson and Thompson has been applied to explain the appearance of hemoglobin complexes of several types derived from the metabolism of aromatic nitro and amino derivatives Hemoglobin deviations were found 24 or more hours prior to the onset of methemoglobinemia in work crews who contributed a statistically significant number of specimens Recently introduced production of chloroanilines and nitrochlorobenzenes disclosed not only unusual cyanosis potential, but also depression of hemoglobin levels below satisfactory limits Experience accumulated during the following 18 months confirmed the appearance of more than 30% abnormalities at least 24 hours preceding cyanosis episodes Over-all laboratory data plotted on a monthly basis revealed locations which needed corrective measures to reduce absorption, detected seasonal ambient temperature effects, and provided long-term hemoglobin trends which revealed chronic exposure conditions A distinct downward trend in average hemoglobin which coincided with the start of chloroaniline production was approximately proportional to the rate of manufacture Adequate exposure control has been attained by improved manufacturing procedures, medical guidance, and use of effective protective clothing

Archives of Pathology

70 397-519 (Oct) 1960

Observations on a Case of *Pneumocystis Pneumonia*
J E McNeal and R G Jaeger p 397
•Histological Appraisal of Kidney in Sickle Cell Anemia
J Bernstein and C F Whitten p 407
•Malignant Intracranial Epidermoid Cyst
J W Landers and J J Danielski p 419
•Effects of Freund s Adjuvant and Its Fractions
J W Steiner, B Langer, and D L Schatz p 424
•Resistance of Reticulocytes and Mature Erythrocytes to Immune Hemolysis—J D Rice Jr and L A Mathies p 435
Glucogenic Corticosteroids and Regression of Lymphosarcoma in Rat—C R Thomas and others p 441
•Thromboembolic Pulmonary Arterial Necrosis and Arteritis
J S Meyer p 445
•Systemic Xanthomatosis
E F Hirsch and F C Bauer Jr p 455
Autologous and Homologous Labeled Gamma Globulin in Multiple Myeloma—S W Lippincott and others p 467
•Regeneration of the Fundic Mucosa in Rats
E Myhre p 476
•Intermittent Radiation and the Life Span of Mice
J T Duhig and S Warren p 486
•Pathology of Cryptogenic Heart Disease
J Higginson, C Isaacson and I Simson p 497
•Heterologous Intracerebral Transplantation of Human Brain Tumors—H Miyawaki and S Ishii p 508

Kidney in Sickle Cell Anemia—A histologic investigation of the kidney in children with sickle cell anemia was undertaken to determine whether or not anatomic alterations that might be present could be related to known alterations of renal function, viz, a universal inability to concentrate urine during water deprivation, frequently increased GFR, ERPF, and Tm_{PAH}, occasional unilateral hematuria, and rare nephrotic syndrome or renal failure Pathologic alterations in the medullary pyramids consisted of edema, telangiectasia, fibrous scarring, and obliteration of tubular elements These have been regarded as the sequelae of localized ischemic necrosis, and by virtue of their predominant location in the papillae they probably underlie the frequently permanent inability of these children to concentrate urine Glomerular enlargement and increased vascularity was observed in the juxtamedullary glomeruli in the older children of the series, and these are believed to provide an anatomic basis for the elevation of GFR and even ERPF that is seen in some cases In the oldest children, however, progressive ischemia and fibrosis supervened, leading to glomerular obliteration These relatively late changes offer a clue to the pathogenesis of the decline in filtration rate in older patients, and they apparently lead to the chronic renal insufficiency observed in occasional cases Tubular necrosis, both active and healing, was a frequent finding Thrombi were not encountered The alteration in Tm_{PAH} has not been correlated with any histologic findings

Malignant Intracranial Epidermoid Cyst—A 73-year-old woman with a puzzling neurologic illness was found at autopsy to have an epidermoid cyst of the cerebellum with histologic evidence of malignant transformation, and with spread of tumor cells throughout the subarachnoid space Only 3 unequivocal previous reports were found of malignancy arising in epidermoid cysts of the central nervous system

Freund's Adjuvant Fractions—This investigation was designed to delineate the morphology of lesions produced by Freund s adjuvant (Mycobacteria in water-in-oil emulsion) and its fractions to serve as a basis for the study of immunologic injury where these substances are used to potentiate the antigenicity of tissue components Rabbits receiving intracutaneous, intramuscular, and intravenous injections of the various materials respectively developed local and systemic granulomata which, it was suggested, have to be subtracted from the lesions produced by the combined tissue-adjuvant mixture It was further suggested that dissemination of the adjuvant occurred via the lymphohematogenous route It was noted that the principal feature of the complete adjuvant lesion was an intense macrophage

reaction which was thought to be of paramount importance in the gradual release of substances from the initial site of injection allowing for maturation of immunologically competent cells to occur in conditions of relative freedom from overwhelming quantities of antigens

Resistance of Reticulocytes and Mature Erythrocytes to Immune Hemolysis—In vitro experiments were carried out to determine whether or not reticulocytes possess any resistance to hetero immune hemolysis as compared to mature erythrocytes Guinea pig reticulocytes showed no differences in their reaction to hemolytic serums when compared to mature erythrocytes, while in the rabbit and in man relative resistance of reticulocytes could be shown only when cells were exposed to undiluted or highly concentrated hemolytic serums In the dog however resistance to hemolysis was apparent with either concentrated or diluted hemolytic serums It appears that, except in the dog, elevations in the reticulocyte count reflect bone marrow activity rather than relative survival of reticulocytes in the peripheral circulation

Thromboembolic Pulmonary Arterial Necrosis and Arteritis—This study followed the chance observation at autopsy of arterial necrosis and acute inflammation accompanying pulmonary thromboembolism The lungs in 23 cases with thromboembolı in large pulmonary arteries were examined Necrosis, interpreted as infarction limited to arterial walls, was found in embolized arteries in 11 of 23 cases, but never in arteries free of thromboembolı It usually was accompanied by an inflammatory exudate containing polymorphonuclear leukocytes Anatomical or clinical evidence of pulmonary hypertension was present in only 6 cases with arterial necrosis, and the arterial lesions appeared to be related to the thromboembolı rather than to pulmonary hypertension Awareness of the frequent occurrence of necrosis and inflammation in embolized pulmonary arteries will prevent misinterpretation of these lesions as periarteritis nodosa or other forms of arteritis in which thrombosis accompanies arterial necrosis and inflammation

Systemic Xanthomatosis—Biliary cirrhosis of the liver and vesicular emphysema with fibrous induration of the lungs are visceral disorders associated with systemic xanthomatosis, but usually they do not occur together A woman, aged 42 years, initially had symptoms resembling pulmonary tuberculosis, then she showed those of a progressive cirrhosis of the liver She died from esophageal hemorrhage Granulomas of the viscera had giant cells with stellate inclusions and Schaumann bodies Lipids extracted from the spleen and lungs had an A fraction rich in cholesterol and a liquid B fraction from which crystals separated like stearin or palmitin, and which resembled the stellate inclusion bodies of the giant cells The visceral granulomas in these forms of systemic xanthomatosis often are diagnosed as sarcoidosis

Intermittent Radiation and Life Span of Mice—A/Jax strain mice were exposed to intermittent (100 r weekly) 400 kv total-body x-irradiation A control group and groups receiving total doses of 500 r, 1,000 r, and 1,500 r were studied Four common diseases nephrosclerosis lymphoid leukemia, pulmonary adenoma, and severe infections were considered in detail and their effects on life span assessed The incidence of lymphoid leukemia and nephrosclerosis was increased by irradiation lung tumors and severe infectious diseases were not so increased Increasing doses of radiation diminished proportionally the mean survival time of any dosage group Female control mice were longer lived than males, but females were more severely affected by all dosages of radiation This was not explained by the distribution of diseases observed The life-span curves derived were compatible with the concept that the irradiated animals had undergone premature aging, but adoption of this idea was precluded by the patterns of disease distribution

Regeneration of Fundic Mucosa in Rats—The effect of cortisone on experimental lesions and on the intact mucosa was investigated by means of tritiated thymidine The findings indicated that the retarded healing of the lesions was due to delayed onset of the healing process both in the epithelium and in the connective tissue Cortisone produced decreased regeneration of the intact mucosa, which was thinner in treated than in control animals

The Pathology of Cryptogenic Heart Disease—There were 80 cases of cryptogenic heart disease in 537 consecutive necropsies on patients dying of heart failure at Baragwanath Hospital, Johannesburg In all cases the hearts showed generalized hypertrophy and dilatation In a high proportion of cases intraluminal thrombi were present Microscopically, the myocardium consistently showed hypertrophy of the muscle fibres Small foci of fibrous scarring were sometimes observed with degeneration of muscle fibres The endocardium, in the main, appeared normal, but areas of mild thickening were sometimes observed In some cases organization of thrombi led to plaque formation but the plaques were not as marked or as frequent as those described as endomyocardial fibrosis in Uganda The clinical and necropsy findings excluded all the usual recognized causes of heart failure No case in the series showed evidence of alcoholism The pathological findings did not permit of any conclusions regarding etiology apart from suggesting that the primary defect lay in the myocardium Stasis seemed to play an important role in intracardiac thrombosis

Heterologous Intracerebral Transplantation of Brain Tumors—A series of 22 human tumors including 19 brain tumors were submitted to heterologous transfer into the brains of x-irradiated Wistar rats treated with prednisolone Of these tumors positive take occurred in one pinealoma There was survival of transplants in 3 instances, including craniopharyngioma, meningioma, and leiomyosarcoma Attempts at transplantation of the other 18 human tumors, including 4 glioblastomas, proved unsuccessful Pinealoma, which was only one example of positive take, demonstrated all the characteristics of the actively growing tumor in the brains of rats Histologically, the most striking feature was the complete disappearance of lymphoid cells in the transplanted pinealoma, originally of the two-cell pattern It was concluded that the lymphoid cells were not an essential tumor constituent of the pinealoma but a non-neoplastic cellular element really of lymphocytic nature, accumulating in the tumor stroma

British Medical Journal, London

I 1829-1906 (June 18) 1960 Partial Index

Beginnings of National Hospital Queen Square (1859-1860)
M Critchley p 1829
*Maternal Health and Mongolism
A Coppen and V Cowie p 1843

*Mumps Meningo-Encephalitis
H G S Murray, C M B Field, and W J McLeod p 1850
Serum Insulin in Case of Severe Diabetes Mellitus Showing Remission—K W Taylor p 1853
Hypothermic Coma in Myxedema
J H Angel and L Sash p 1855

Maternal Health and Mongolism—The genetic basis of mongolism has been established by the discovery of an extra chrosome in the cells of mongols While the cause of this abnormality remains unknown, attention has been given to maternal factors The authors made studies on 55 mothers of mongols, whose ages ranged from 28 to 61 years, and in whom a mean number of 10 6 years had elapsed since the birth of the mongol Medical, gynecologic, and obstetric histories were taken Special attention was given to evidence of thyroid dysfunction In addition, anthropometric measurements were made, the serum protein-bound iodine (PBI) level was estimated, and a personality inventory was taken The findings failed to confirm earlier reports of thyroid abnormality or raised serum PBI level The body build of the group as a whole did not differ from the normal However, it was found that the group of mothers bearing a mongol at 27 years of age or younger had a significantly raised mean androgyny score The androgyny score was obtained for each woman by measuring the biacromial and bi-iliac diameters and incorporating them into a formula The term androgyny implies the presence of masculine features in women and of feminine features in men The obstetric histories of the mothers of mongols showed an extremely high rate of miscarriage, but this was unrelated to the birth order of the mongol It was also observed that the mothers with multiple miscarriages had a raised androgyny score Psychological testing and general medical history of the mothers of mongols showed no deviations from the normal

Mumps Meningo-Encephalitis—An epidemic of mumps occurred in Northern Ireland during 1958, in which meningo-encephalitis was prevalent Of the 50 cases of mumps meningo-encephalitis reviewed in this paper, 39 occurred in 1958, 5 in 1957, and 6 in 1959 The diagnosis was confirmed in all cases by complement fixation tests using viral (V) and soluble (S) antigens All but 8 of the patients were children less than 15 years of age, and the male to female sex ratio was more than 2 1 Parotitis and/or other salivary gland involvement existed in only 27 of the 50 patients, but, apart from the absence or presence of parotitis, the clinical findings were essentially the same in the 2 groups, including fever, headache, neck rigidity, and vomiting About one-third of the patients showed signs of encephalitis The peak incidence of mumps meningo-encephalitis occurred in the late spring and early summer months, and there was no difference in the seasonal incidence of mumps meningo-encephalitis with parotitis and without parotitis Mumps virus infection appears to have been more readily transmitted by patients with parotitis than by patients without enlarged salivary glands The absence of serious sequelae in this series suggests that a good prognosis may usually be given in mumps meningo-encaphalitis

Lancet, London

1 1305-1358 (June 18) 1960 Partial Index

The Female Prostate
T Moore p 1305
*Anticoagulant Drugs in Treatment of Pulmonary Embolism
D W Barritt and S C Jordan p 1309
Effect of Intragastric Oxygen on Oxygenation of Blood in Hypoxic Animals—R V Coxon p 1315
*Staphylococcic Septicemia (1936-1955), 338 Treated and Untreated Patients—I M Smith and B Vickers p 1318
Antifibrinolytic Activity and Metabolism of ε-Aminocaproic Acid in Man—I M Nilsson and others p 1322

Anticoagulant Drugs in Pulmonary Embolism—The aim of this study was to determine the effect, in patients who have had one pulmonary embolism, of anticoagulants on the course of the first embolism and on the risk of further attacks Clinical examination was combined with roentgenography of the chest and with electrocardiography When pulmonary embolism was diagnosed, the only contraindications to anticoagulants were either a recent operation, or a recent peptic ulceration If pulmonary embolism had occurred within a week of operation anticoagulants were used, except after mastectomy or prostatectomy The time that elapsed between the first symptom and inclusion in the trial varied from a few minutes to as long as 12 days, but was within 24 hours in most cases Heparin was given by intravenous injection in doses of 10,000 units every 6 hours for 6 doses Acenocoumarol (nicoumalone) was given concurrently and the prothrombin-time estimated on the 3rd day Treatment was continued for 14 days Of the first 35 patients a random selection was made of those to whom anticoagulants were to be given Of the 19 untreated cases 5 died and 5 others had nonfatal recurrences of embolism Of the 16 cases treated with anticoagulants 1 died and none had recurrences of embolism The 1 death in the treated series was due to suppurative pneumonia and alimentary bleeding There was only 1 further death among 38 other treated patients, and this occurred in a patient mistakenly treated with another drug instead of with acenocoumarol Treatment with heparin and acenocoumarol reduces the risk of death from existing embolism and reduces the incidence of recurrence

Staphylococcic Septicemia in 338 Patients—The authors assessed the course and outcome of staphylococcic septicemia in 338 patients observed from 1936 to 1955 at the University Hospitals of Iowa City, Iowa The histories of the 338 treated and untreated patients were obtained from both the clinical and the autopsy records The authors believe that the incidence of staphylococcic septicemia cannot be accurately assessed without bacteriological studies at autopsy They took blood cultures at autopsy in 91% of the 237 fatal cases In the vast majority of cases the first blood culture was positive, but a series of 3 should suffice for diagnosis A high proportion of cases was not diagnosed before death Staphylococcic septicemia occurred in all age groups, but it was commonest at the extremes of life It was twice as frequent in males as in females In untreated patients the fatality rate was 90% After 1950 the incidence of the disease rose, but the fatality rate in treated cases fell As each new effective agent came into use, the mortality decreased, but with continued use the new agent lost its efficacy Apart from a golden age between 1946 and 1950, the incidence of staphylococcic septicemia was more or less the same throughout the 20-year period At autopsy hemorrhagic necrotizing pneumonia was most often found Endocarditis was observed in 10% of the patients who had staphylococci in the blood The disease usually proved fatal when staphylococci entered the body via the respiratory tract or as a postoperative complication Many patients succumbed to this disease when they were debilitated by other conditions Administration of penicillin, alone or with other drugs, was the most effective treatment

WASHINGTON NEWS

Nixon Issues Policy Statement
State Action on New Health Law
Miscellany

NIXON HEALTH PROGRAM

Vice-president Richard M Nixon has called for increased federal aid for medical research and education In a policy statement, the GOP presidential candidate stressed that the key to his program was an expanded effort from private sources, since every American has a vital, personal concern with illness"

Nixon proposed a federal plan to provide scholarships for medical students, aid for construction and modernization of medical schools as well as for medical research facilities, and more federal funds for research grants

Nixon said the new President must take the lead in mobilizing an effort to obtain greater cooperation from corporations, industries, labor unions, foundations, and other private sources to share the burden

He expressed concern about providing enough physicians for a growing population, declaring that at the present rate there would be a critical physician shortage in 10 years A federal medical fellowship plan, divided up between outright grants and loans, 'would make it possible for our best students to go into medicine and would prevent our best potential talent from entering other fields because they cannot afford full medical training,' said Nixon

Sen John F Kennedy (D, Mass), Democratic Presidential nominee, has not spelled out any specific program in this field, but has called in general terms for more spending on medical research and facilities

However, both candidates have made clear their views on another health matter—health care of the aged

Nixon has said the measure approved by Congress this year is a good first step', has urged the states to implement it, but has also recommended adding on to this plan a program of federal and state subsidized health insurance for the needy elderly He has come out squarely against the social security approach of financing health care costs, or any other compulsory scheme

Kennedy has advocated the social security route and accused the GOP candidate of not wanting to provide real help for the nation s older citizens

In the two candidates first public debate on television heres what they had to say on the subject

Nixon— of course it is not possible, particularly under the proposals that Senator Kennedy advocated, to either cut the national debt or to reduce taxes As a matter of fact, it will be necessary to raise taxes Senator Kennedy points out that as far as one proposal is concerned, the one for federal care for the aged, that that would be financed out of social security That, however, is raising taxes for those who pay social security If he unbalances the budget, that means you have inflation, and that will be, of course, a very cruel blow to the very people, the older people, we have been talking about

Kennedy— on medical care to the aged, this is the same fight that has been going on for 25 years in Social Security We want to tie it to social security In my judgment, a vigorous Democratic President supported by a Democratic majority in the House and Senate, can win the support for these programs

Nixon— the reason why these particular bills were not passed was not because the President was against them It was because they were too extreme, and I am convinced that the alternate proposals that I have because they are not extreme, because they will accomplish the end without too great cost in dollars or in freedom could get through the next Congress

Kennedy— Medical care for the aged, which was tied to social security, does not put a deficit on the treasury The proposal advanced by you—would have cost $600 million I think it shows the difference between the two parties One party is ready to move in these programs, the other party gives them lip service

Nixon— Our health program is one that provides for all people over 65 who want health insurance, the opportunity to have it if they want it It provides a choice of having either government insurance or private insurance, but it compels nobody to have insurance who does not want it

STATES MOVE ON NEW HEALTH PLAN

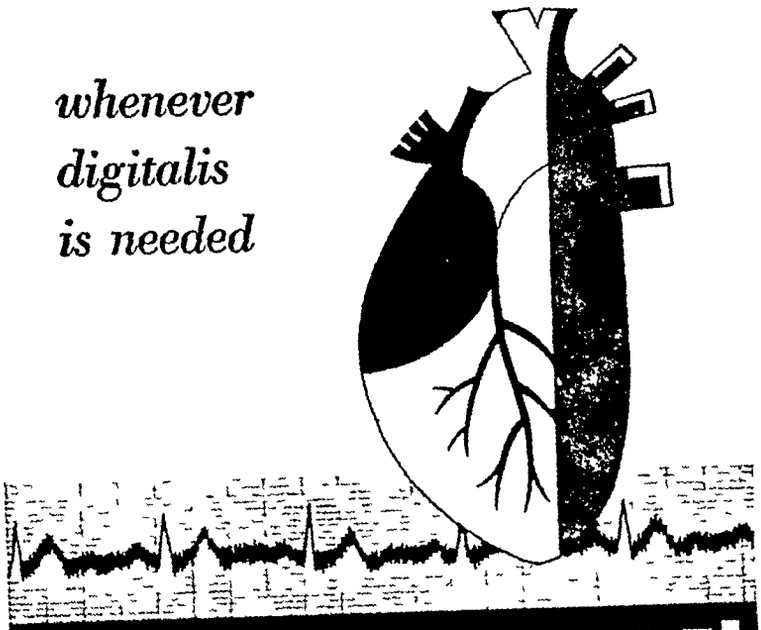
Michigan became the first state to qualify under the federal government's newly enacted medical care program for the aged, and other states were preparing to join in the plan soon

The way was paved for Michigan s participation when the state legislature approved two bills authorizing state participation under the program that provides more federal aid for the states medical programs for indigent aged and aid for the elderly who cannot afford to meet all of their health care costs

Meanwhile, Secretary of Health, Education and Welfare, Arthur S Flemming, met with state public

(Continued on next page)

whenever digitalis is needed



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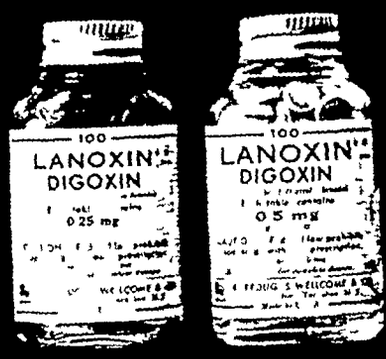


"If one digitalis agent were to be recommended for its adaptability to the many and varied clinical contingencies, we believe Digoxin would be [a] drug of choice."

Lown, B, and Levine, S A: Current Concepts in Digitalis Therapy, Boston, Little, Brown & Company

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, New York

welfare administrators to brief them on the new program and to advise them on how to participate

The American Medical Association joined the Administration in urging swift implementation of the plan by the states AMA President Dr W Vincent Askey declared that "we intend to take every possible action to see that the law is implemented quickly and effectively" The AMA has scheduled a meeting of state medical society officials on Nov 27 to discuss how the state societies can help the states in organizing the new health plan and carrying it out

Despite the progress made so far, a spokesman for the insurance business warned that the fight in Congress over compulsory government medicine schemes is not over Paul M Hawkins, Washington counsel of the Health Insurance Association of America, said the congressional action this year should be viewed by opponents of compulsory federal intervention into medicine as a reprieve more than a victory Backers of a compulsory system may use the White House Conference on Aging in January as a vehicle for "further opportunity to disseminate their arguments," he said

PLAN REHABILITATION FACILITY FOR SEVEN STATES

A regional center for educating physically handicapped students in a seven-state area including Missouri, Iowa, Minnesota, North Dakota, South Dakota, Nebraska, and Kansas is being established at the University of Missouri with the support of a grant from the Office of Vocational Rehabilitation of the U S Department of Health, Education, and Welfare The grant is for $700,000 and covers a period of five years, starting Sept 1 For the first year the university has been allotted $122,937 for the research and demonstration program An additional $39,450 is being contributed by the university Under the program the university will become an educational center for gifted physically handicapped students from the seven states, which make up Federal Health, Education, and Welfare Region VI The aim of the project is to provide adequate higher educational opportunities for students of ability who now are unable to attend university or college because of physical handicaps The program will involve modifications of all major facilities on the campus so that physically handicapped students may be able to get around the campus and its buildings freely, and have access to all major divisions The modifications will include installation of elevators in older buildings and other changes in campus structures, construction of ramps and other aids, and modifications in side walks and curbs It is expected to be the fall semester of 1962 before adequate modifications have been made to start enrolling handicapped students

EXAMINATION FOR MEDICAL OFFICERS IN PUBLIC HEALTH SERVICE

Competitive examinations for the appointment of physicians as medical officers in the regular corps of the United States Public Health Service Commissioned Corps will be held throughout the

United States on Jan 31, and Feb 1 and 2, 1961 Appointments provide opportunities for career service in clinical medicine, research, and preventive medicine-public health They will be made in the P H S officer grades of assistant surgeon and senior assistant surgeon, equivalent to navy ranks of lieutenant (j g) and lieutenant, respectively Entrance pay for assistant and senior assistant surgeons with dependents is nearly $8,000 a year Benefits include periodic in-grade pay increases, 30 days' annual leave with pay, sick leave with pay, full medical care, disability retirement pay, retirement pay (three-fourths of annual basic pay at time of retirement), and other privileges Active duty as a Public Health Service officer fulfills the selective service obligation for military duty Requirements are U S citizenship and graduation from a recognized school of medicine For the rank of assistant surgeon, at least seven years of collegiate and professional training and appropriate experience are needed For senior assistant surgeon, an additional three years, for a total of at least 10 years of collegiate and professional training and appropriate experience, are needed Applicant must be under 34 years of age for appointment to assistant grade, under 37 for senior assistant grade Entrance examinations will include an interview, physical examination, and comprehensive objective examinations in the appropriate professional fields Application forms may be obtained by writing to the Surgeon General, United States Public Health Service (P), Washington 25, D C Completed application forms must be received not later than Dec 2

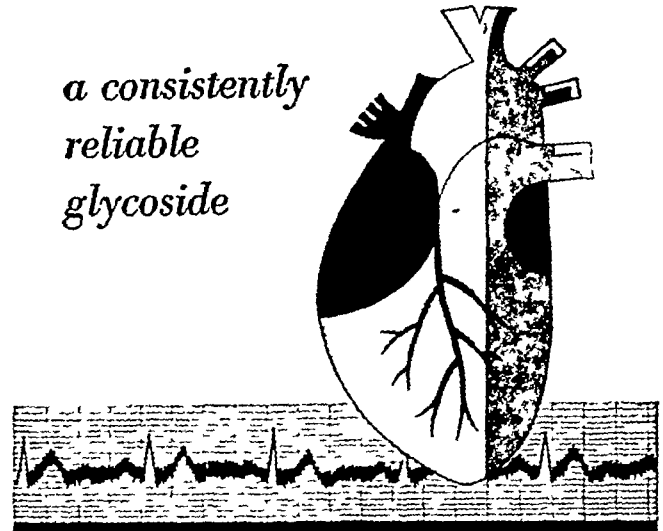
MISCELLANY

The Public Health Service announced the award of 33 grants totaling $789,236 for demonstrations in the early diagnosis of cancer and for training laboratory assistants in methods that aid in early diagnosis This was the third set of grants awarded for the past fiscal year, bringing the total to $1,397,649 for 49 grants One year ago, Congress appropriated funds for the first time for community projects designed to encourage wider application of existing knowledge about controlling cancer Projects in seven states will assist medical societies, hospitals, and medical schools to explore methods of getting more women to take advantage of a proved cell-examination method for helping to find early—and curable—uterine cancer

The federal government s prime research agency, the National Institutes of Health, awarded $229 5 million in medical research grants to private institutions in the fiscal year that ended last June 30 The grants went to 973 U S institutions and 145 in other countries Following a trend of recent years, largest grants in disease categories were for cancer and heart research, $34 and $35 million respectively

The Food and Drug Administration proposed new labeling requirements for dihydrostreptomycin warning that under certain circumstances it can cause auditory impairment or total deafness The agency said the new labeling resulted from a discovery that auditory damage could be caused by use of a much smaller amount of the drug or use for a much shorter period than was formerly believed necessary

a consistently reliable glycoside



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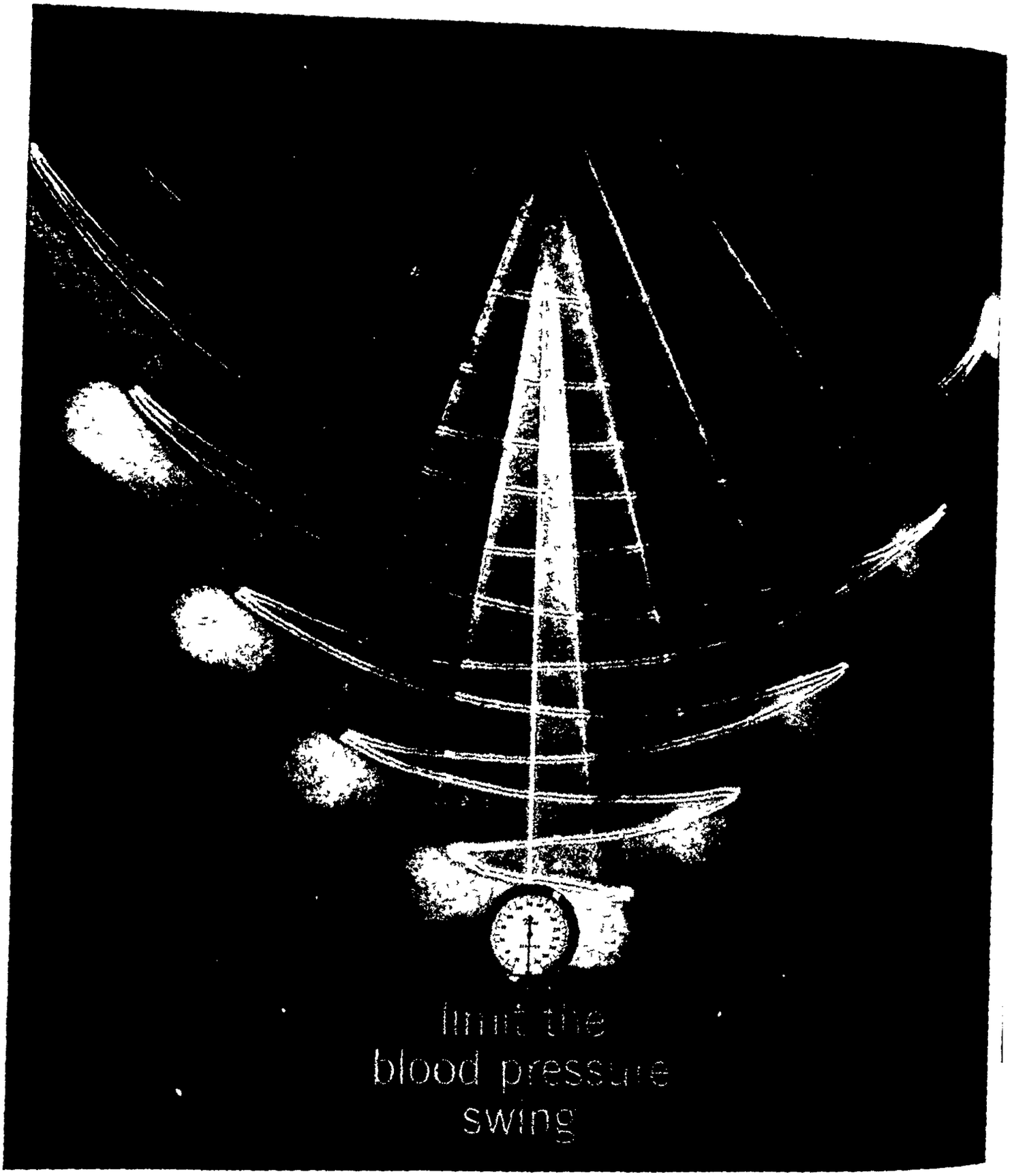

Rautrax-N lowers high blood pressure gently, gradually — protects against sharp fluctuations in the normal pressure swing Rautrax-N combines Raudixin, a cornerstone of antihypertensive therapy, with Naturetin, the new, well-tolerated diuretic-antihypertensive agent The complementary action of the components permits a lower dose of each thus reducing the incidence of side effects The result Maximum effectiveness, minimal dosage, enhanced safety Rautrax-N also contains potassium chloride—for added protection against possible potassium depletion during maintenance therapy

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SQUIBB

MEDICAL NEWS

New Medical Care Plan for Elderly

St Louis County Society Announces Proposal—A unique health plan, which is being organized by the St Louis County Medical Society to provide better and more easily available medical care services for elderly people, was described by Dr Joseph B Kendis, president of the society, at a Public Relations Institute meeting held in Chicago last month

The society hopes to develop a local plan sponsored by the medical profession Charges for medical care will be adjusted according to ability to pay, and freedom of choice for both patient and physician will be maintained The services will not be limited to Social Security recipients, all will be eligible

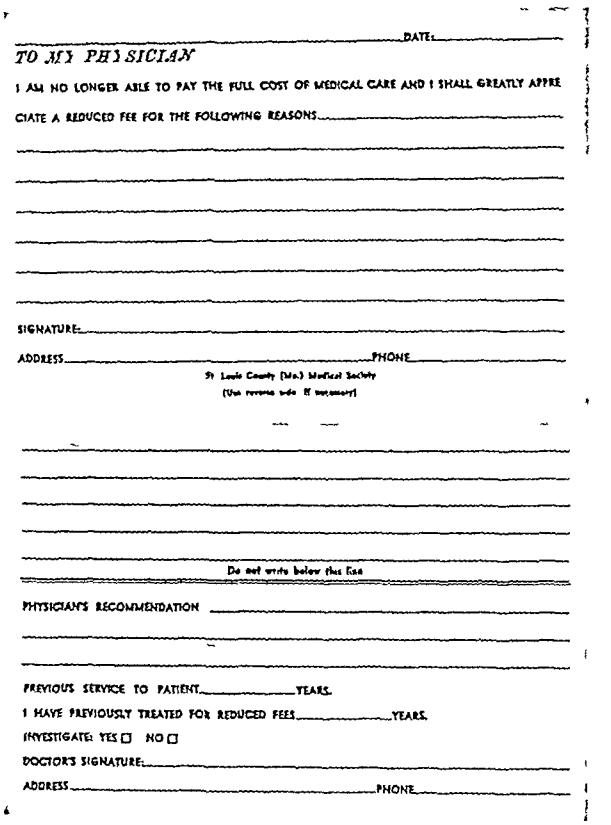
Before outlining the proposed plan, Dr Kendis gave details of the fees charged by the clinics of ten of the community s largest hospitals They are as follows

Clinic Fees of St Louis County Hospitals

Hospital	Basic Rate
A	$1 00
B	$0 50-$3 00
	$0 10 $1 00 (2nd visit same day)
C	0* -$2 00 (1 visit)
D	0* -$3 00
E	0* -$2 50
F	0* (10%)-$2 95 (10%)
	$2 20 (majority)
G	0* -70% usual charge
	0 mostly to Co Hospital
	½ above 50%
H	0* -$2 00 (50% free)
County	All free
City	Non pay Z $0 10
	Part pay Y $0 50
	Full-pay X (emergency only)
	$3 00 $5 00

*Usually for welfare patients only referred when possible to city and county hospitals

The first step taken by the society was to poll each member, asking if he would cooperate in the plan Within two weeks the society had received more than 50% response Meanwhile the plan was given wide publicity via newspapers, radio, and television It is proposed that, when a patient attends the office of a participating physician and requests help, he will be asked to complete a card (Fig 1) The physician will then complete his section of the card, indicating whether he knows the patient sufficiently well to suggest a rating or whether further investigation is necessary The card will be mailed to the medical society office and, if a



DATE:

TO MY PHYSICIAN

I AM NO LONGER ABLE TO PAY THE FULL COST OF MEDICAL CARE AND I SHALL GREATLY APPRECIATE A REDUCED FEE FOR THE FOLLOWING REASONS

SIGNATURE:

ADDRESS PHONE

St Louis County (Mo.) Medical Society

(Use reverse side if necessary)

Do not write below this line

PHYSICIAN'S RECOMMENDATION

PREVIOUS SERVICE TO PATIENT YEARS.

I HAVE PREVIOUSLY TREATED FOR REDUCED FEES YEARS.

INVESTIGATE: YES ☐ NO ☐

DOCTOR'S SIGNATURE:

ADDRESS PHONE

Fig 1—Patient s request card for fee reduction is completed in doctor s office

rating has been suggested, the medical society will notify the patient of the percentage reduction approved (Fig 2) If, on the other hand, further investigation is requested, the patient will be asked to attend the medical society office for an interview so that the necessary particulars may be obtained (Fig 3) and a percentage rating made Since the amount of fee reduction warranted might depend on the volume and length of medical care services as well as on the financial status of the patient, periodic review will be provided at the request of either patient or physician

It is not anticipated that the medical society will underwrite the service Possible sources of support for such a program, including various national and local charity foundations, are being explored The local chapter of the American College of Apothecaries has been contacted and it is hoped that they will cooperate with the physicians on the same rating basis

(Continued on following page)

ST. LOUIS COUNTY, MO., MEDICAL SOCIETY

This is to certify that _____

has been approved for a _____% reduction of usual medical fees in the office of any participating physician

Patient's signature _____ _____

Height_____ _____ Weight_____ Sex_____

SUGGESTIONS TO PATIENTS
HELP YOUR DOCTOR HELP YOU

1) Be prompt Keep your appointments

2) To prevent additional expense to your physician please arrange for payment at time of visit

3) To qualify for discount you must present this card at the time of each visit

4) This card expires _____ _ _

Fig 2 —Notification of percentage fee reduction approval is sent to patient by medical society

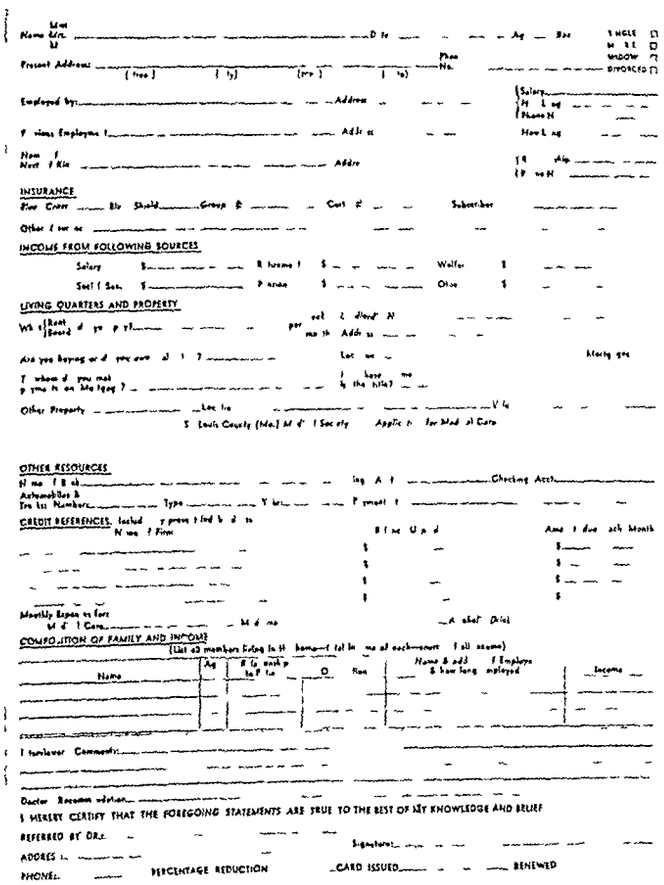


Fig 3 —Particulars regarding financial status are given by patient to medical society interviewer when further investigation is requested

COLORADO

Hospital Honors Veteran Staff Member—A testimonial dinner was held at St Anthony's Hospital, Denver, in September in honor of Dr John G Ryan, who had been a member of the staff for 50 years A plaque presented to the guest of honor citing Dr Ryan's "half-century of devotion to the service of man" will be placed in a medical ward of the hospital's new $4,500,000 wing now under construction The plaque was presented by Sister Mary Lina, administrator of the hospital, and Dr Lloyd Wright, chief of staff Dr Ryan, a graduate of Rush Medical College, was also for many years on the faculty of the University of Colorado Medical School, where in 1948 he was awarded the 'Gold-Headed Cane" He retired in 1953 as "clinical professor of medicine emeritus"

DELAWARE

State Medical Election—At the 171st annual meeting of the Medical Society of Delaware, held in Rehoboth Sept 8-10, the following officers were elected president, Dr Lemuel C McGee, Wilmington, vice-president, Dr Gerald A Beatty, Wilmington, president-elect, Dr Sylvester W Rennie, Wilmington, secretary, Dr Joseph W Abbiss, Wilmington, and treasurer, Dr Charles Levy, Wilmington The 1961 annual meeting will be held in Wilmington during October

DISTRICT OF COLUMBIA

High School Students Complete Research Project—Surgeon General L E Burney of the Public Health Service spoke Sept 3 in the Georgetown University Auditorium to 26 high school juniors, who for two months worked with established scientists on research in basic or clinical science in the Georgetown University Medical Center The primary goal of the project, reportedly the first of its kind in the country, for which the 26 students won summer scholarships, was to attract "more high calibre students to medical and dental scientific research' Dr Burney pointed out that in the field of health there is a great variety of occupations from which to choose, the Public Health Service now having more than 60 professional health specialties The students were praised by Dr Burney, Dr Hugh H Hussey Jr, dean of the School of Medicine, and Clemens V Rault, D D S, M S D, dean of the School of Dentistry

HAWAII

Public Health Conference—The Hawaii Public Health Association will act as host for the first Pan Pacific Public Health Conference to be held Nov 6-12 in Honolulu Following the technical

Physicians are invited to send to this department items of news of general interest, for example those relating to society activities new hospitals, education, and public health Programs should be received at least three weeks before the date of meeting

sessions Nov 6-7, field inspections of health facilities and problems will be conducted Nov 8-11 The following speakers and topics have been announced by Dr Leo Bernstein, chairman of the program committee

- Public Health and Anthropology in the Pacific Islands Area, Dr Alexander Spoehr
- Public Health in Hawaii—A Historical Perspective George V Moorhead
- Highlights of Hawaii's Hansen's Disease Story, Dr E K. Chung-Hoon
- Oahu's Water Sources (Artesian System), E J Morgan, Honolulu
- Studies to Appraise Our Environment (Panel), B J McMorrow
- Plague Research, Dr Charles Wheeler
- Encephalitis Studies, Patrick Nakagawa
- Studies of Air Pollution During Volcanic Eruptions Robert Nekomoto
- Recent Advances at the University of Hawaii, Dr Laurence Snyder, Honolulu
- Arteriosclerosis Studies in Hawaii Studies in Man—Progress Report on Hawaii Arteriosclerosis Survey, Dr Thomas McBride Studies in Animals—Progress Report on Bovine Arteriosclerosis Studies in Hawaii with Reference to Public Health, Dr Gordon Wallace

ILLINOIS

New Research Center for Zoonoses—A new research center for zoonoses, the first in the United States and the second in the world, is being activated at the University of Illinois Initially, studies will be limited to diseases common to man, livestock, and wild life, and the passage of diseases between man and his pets Veterinarians, medical doctors, biologists, and climatologists will all join in cooperative research at the University of Illinois center, which will be directed by Dean Carl Brandly, College of Veterinary Medicine

Chicago

Final Baer Lecture Scheduled—For the 10th and final year, a lecture will be given in memory of Dr Joseph L Baer, pioneer Rush Medical School gynecologist, at the meeting of the Chicago Gynecological Society on Friday, Oct 21, at 8 P M in the Drake Hotel Speaker will be Dr Ludwig A Emge, chief of obstetrics and gynecology at Stanford University His subject is The Elusive Adenomyosis Uterus

Medical History Meeting—There will be a meeting of the Society of Medical History of Chicago at the Institute of Medicine (fourth floor, 86 E Randolph St) on Wednesday, Oct 19, at 8 P M This is an open meeting The program will include Dr Stephen Rothman, professor emeritus of dermatology, University of Chicago, presenting The Illnesses of W A Mozart,' and Dr Albert M Potts, professor of ophthalmology University of Chicago, speaking on "The Mind's Eye" For information, write Dr Leo M Zimmerman, secretary-treasurer, 55 E Washington St, Chicago 2

Dustfall in Chicago—After two months of record low dustfall readings in Chicago, the August average was up 11% over July The 32 9 tons per square mile reading, however, was three-tenths of a ton lower than that of August, 1959, according to the Armour Research Foundation Average total dustfall readings for June and July, 1960, were 31 9 and 29 5 tons per square mile respectively, the lowest averages since the A R F records were started in 1948 Highest station reading for August was 62 4 tons in the Loop Low for the month, 16 0 tons was recorded at a far north-west station

Society News—The newly elected officers of the Chicago Society of Allergy for 1960-1961 are Drs Bert B Schoenkerman, president, Milwaukee, Wis, Charles M Jenkins, president-elect, and Abe Matheson, secretary-treasurer, 30 N Michigan Ave, Chicago 2—The new officers of the Chicago Gynecological Society for the current year 1960-1961 are president, Dr Edwin J DeCosta, president-elect, Dr David N Danforth, Evanston, vice-president, Dr Lester E Frankenthal Jr, treasurer, Dr John H Isaacs, secretary, Dr Charles P McCartney, and assistant secretary, Dr Hugo C Baum

History of Surgery Lecture—The first of the fifth series of lectures on the history of surgery and related sciences arranged by the International College of Surgeons will be given by Dr Paul C Hodges at the International College of Surgeons' Hall of Fame, Chicago, Oct. 18 at 8 P M Dr Hodges, professor emeritus of radiology, University of Chicago, and consultant in radiology, Veterans Administration, will speak on 'Medicine in Russia and in Free China Other speakers and topics in the series are as follows

Nov 15—Leslie B Arey Ph D Evanston, The Resurrectionists
Jan 10—Emily C Cardew, M S, Nursing in the Social Order
Jan 31—Dr Raphael B Durfee, The Evolution of Cesarean Section
Feb 21—Capt Gerald J Duffner, Medical and Health Problems Associated with the Operation of Nuclear Submarines
Mar 14—Dr Morris H Kreeger, The Nature of the Modern Hospital
April 4—Dr Alexander Rytel, Polish Contributions to Medical Science
Apr 18—Dr Philip Thorek Food for Thought
May 23—Dr William B Serbin, Physician Signers of the Declaration of Independence

Students Receive Scholarship and Research Awards—Honor awards for high scholarship and research

accomplishments were presented to nine Northwestern University medical school students and graduates at ceremonies during the school's 103rd convocation Commemorating the founders of the medical school in Chicago, the convocation officially opened the 1960-1961 class year Announcement of the special student awards in six research and scholastic categories was made at the convocation opening Four recipients are new physicians who were graduated from Northwestern in June One senior, Robert L Parker, of Hollansburg, Ohio, was winner of two awards Dr Marsh H Holt, of Phoenix, Ariz, received the Borden Undergraduate Research Award in Medicine for "meritorious research completed during medical training" Cited for honorable mentions for the Borden award were Dr Thomas J Fiene, interning at Colorado General Hospital, Denver, and Dr Earl R Berry, serving at Evanston (Ill) Hospital Individual winners of George J Dennis 16th Phi Rho Sigma Scholarship Awards were Mr Parker, recognized for maintaining the highest scholastic average during the first three years of school, and Dr Albert D Newcomer, Los Angeles, cited for contributing the most of his medical fraternity, Nu Sigma Nu, toward winning the fraternity's scholastic award Parker also won the Roche Award for outstanding scholastic attainment during the sophomore year The Phi Beta Pi-Leslie B Arey Award, for "outstanding scholastic achievement in the study of anatomy," was presented to Irun Cohen, Lincolnwood, Ill Michael V Herman, Westville, Ill, earned the Frederick H Rawson Award for attaining the highest scholastic average during the first two years in the medical school John E Dunn, Elgin, Ill, received the Sigmund S Winton Award, established in honor of a former Northwestern faculty member, and presented to the freshman student who has done outstanding work in the field of biochemistry Also during the ceremonies the Dr James K Stack Scholarship Award was formally presented to James G Ramsey Jr, Marinette, Wis, who registered for his freshman year in the Northwestern Medical School This four-year scholarship was established by Dr John W Howser, of Oak Park, Ill, in honor of Dr Stack, associate professor of orthopedic surgery

KENTUCKY

Physicians' Regional Meeting in Lexington—The Kentucky Regional Meeting of the American College of Physicians will be held in Lexington, Oct 29 The following papers are scheduled for the afternoon scientific program

- Management of Advanced Breast Cancer, Dr William A Blodgett, Louisville
- Cross Tolerance Between LSD and Psilocybin, Dr Harris Isbell, Lexington
- A Syndrome of Iron Deficiency Anemia, Hepatosplenomegaly, and Geophagia, Dr James A Halsted, Lexington
- Current Concepts of the Function of Bone as an Electrolyte Reservoir, Dr Edmund D Pellegrino, Lexington
- Carbon Tetrachloride Poisoning, Drs Beverly T Towery, Louis Y Peskoe, and James L Nicholson, Louisville
- Rupture of Sinus of Valsalva into the Heart, Dr Leonard Leight, Louisville
- Parathyroid Disease as a Cause of Bilateral Renal Calculi, Dr Matthew C Darnell, Lexington

The evening session will consist of a cocktail party followed by a dinner at which Dr Howard P Lewis, regent and immediate past-president of the college, will be guest speaker

MICHIGAN

Warning on Trailer Heaters—Hunters are being cautioned by Dr Albert E Heustis, Lansing, state health commissioner, to make sure that their trailer heaters are safe to prevent a recurrence of the tragedies which killed nine and hospitalized at least four hunters in Michigan last year The following safety precautions were advised

1 Gas heaters should be equipped with an automatic control which shuts off the flow of gas in case of pilot flame failure

2 Vent stacks should be of approved construction and should be raised at least 8 in above the roof line

3 Gas heaters should be constructed and installed to withstand road shock

4 Air intake for combustion must be supplied through 10 sq in openings to the outside adjacent to the heater

A recommendation that car windows should be left open a little while traveling was also issued by health department engineers Fifty-nine persons are reported to have died from accidental carbon monoxide poisoning in Michigan last year

MISSISSIPPI

Faculty Appointments Announced—Six new faculty appointments have been announced by the University of Mississippi School of Medicine in Jackson, five in newly filled teaching positions on the growing faculty and one to fill a vacancy left by a resignation Dr Karl A Bolten, named assistant professor of obstetrics-gynecology, taught at Louisiana State University for three years before completing a residency in pathology at Oklahoma University this year Peter Cervoni, Ph D, assistant professor of pharmacology, last year did postdoctoral research at Downstate Medical Center in New York Frederick Lynch McGuire, Ph D, who was appointed assistant professor of psychiatry, received all his education at New York State University New assistant professor of neurosurgery and anatomy is Ervin William Powell, Ph D, who comes to the Medical Center from the faculty of Creighton University in Omaha Dr John A Gronvall, instructor in pathology, recently completed his residency at the University of Minnesota A new instructor in neurosurgery, Dr Forrest T. Tutor, finished his

residency at the University of Cincinnati and replaces Dr G Scarcello

NEW HAMPSHIRE

Hospital Construction Program—A construction program totalling $192,000 has been started at the Mary Hitchcock Memorial Hospital to complete an unfinished floor that was provided with the construction of an addition to the hospital's Faulkner House four years ago The new area, which is expected to be completed early in 1961, will provide (1) an all-purpose surgical room which will house specialty radiological equipment and other facilities related to the performance of cardiovascular and other surgery, (2) an area for the consolidated activities of the surgical pathology division of the department of laboratory medicine, and (3) a relocated cast room for the department of orthopedic surgery Funds for the projects were made available through the Hill-Burton Act, administered through the Bureau of Hospital Services of the New Hampshire Department of Health, a grant from the John A. Hartford Foundation, and through donations made by individuals and businesses

NEW YORK

Faculty Appointments—Five new appointments to the faculty of the State University of New York Downstate Medical Center in Brooklyn have been announced Dr Morris Kleinfeld has been named clinical associate professor of medicine, Dr Rudolf Singer, clinical assistant professor of otolaryngology, Dr Jerome S Silverman, clinical assistant professor of psychiatry, Dr Arnold N Fenton, clinical assistant professor of obstetrics and gynecology, and Dr Patricia Heely, lecturer in environmental medicine and community health

University News—On Sept 16 the trustees of the State University of New York announced that they granted Carlyle Jacobsen, Ph D, president of the Upstate Medical Center and dean, College of Medicine, Syracuse, a leave of absence to undertake a month's study of medical education abroad for the International Cooperation Administration of the United States government The study will be carried on principally at the University of Shiraz in Iran and will also involve conferences at the five other medical schools in Iran Dr Jacobsen announced that Wilfred W Westerfeld, Ph D, chairman, department of biochemistry at the college, will be acting administrative officer during his absence

Symposium Held on Psychology in Traffic Safety—The Joint Legislative Committee of Motor Vehicles and Traffic Safety, State of New York, held a Symposium on the Psychological Aspects of Traffic Safety" at Hofstra College, Knickerbocker Room, Memorial Hall, Hempstead, at 10 A M, Oct 3 Six psychiatrists and psychologists presented papers at the symposium which served as a public hearing by the Joint Legislative Committee, attended by the member legislators The purpose of the symposium was to gather information about the psychological causes of highway accidents, the motivations for persistent violation of the traffic laws, and the legislative and educational remedies which might be most beneficial Law enforcement officers, medical society officials, and educators, attended

Society News—The Northeastern New York Radiological Society has elected the following officers for 1960-1961 president, Dr Everett A Jacobs, Hudson, N Y, vice-president, Dr James A Glenn, Glens Falls, N Y, secretary-treasurer, Dr Lester I Citrin, Albany—At a meeting of the New York Academy of Gastroenterology, an affiliate of the American College of Gastroenterology, the following officers were elected for 1960-1961 Drs Joseph Roger Van Dyne, Forest Hills, president, Hyman M Robinson, Brooklyn, president-elect, Henry Colcher, New York City, first vice-president, Emanuel M Rappaport, Jamaica, second vice-president, Edward J Nightingale, New York City, secretary, and Jerome Weiss, New York City, recording secretary

Tuberculosis Sanatorium at Middle Grove Closed—The closing of the Homestead Tuberculosis Sanatorium at Middle Grove, Saratoga County, effective Sept 1, was announced by the New York State Health Department The sanatorium, which has been open since 1929, has been operated by Saratoga County for the care of tuberculosis patients in the county The announcement was made after Dr Herman E Hilleboe, Albany, state health commissioner, received an application from the Saratoga County Board of Supervisors to close the sanatorium Tuberculosis care for residents of Saratoga County will now be provided by the Glenridge Hospital in Schenectady Homestead Sanatorium had 60 beds for use by patients with tuberculosis Chest clinic services in Saratoga County will be continued under county auspices

Personal—The appointment of Dr John J Bourke, of Albany, as assistant commissioner for hospital review and planning in the State Health Department was announced Sept 15 by Dr Herman E Hilleboe, state health commissioner The Division of Hospital Review and Planning was established under a reorganization of the State Health Department and the assignment of the hospital survey and planning function to the department by the 1960 legislature—The appointment of Dr Dudley W Hargrave, Kingston, as associate public health physician (medical rehabilitation) with the State Health Department was announced Sept 15 by Dr

Herman E Hilleboe Dr Hargrave has been commissioner of health in Ulster County since 1952 He received his doctor of medicine degree from the University of Cincinnati in 1941, and his master's degree in public health from the Johns Hopkins School of Hygiene and Public Health in 1947.

New York City

Dr Sicher to Give Herman Reiss Memorial Lecture —The New York Institute of Clinical Oral Pathology announced that the ninth Herman L Reiss Memorial Lecture will be given by Dr Harry Sicher, Chicago, at the New York Academy of Medicine Building, 2 E 103rd St, on Oct 31, 8 30 P M Dr Sicher, who is chairman, departments of anatomy and histology, Loyola University, School of Dentistry, Chicago College of Dental Surgery, Chicago, will speak on "Anatomy and Oral Pathology"

Personal —Dr Milton J Goodfriend has been appointed full-time director of Medical Education at Lebanon Hospital, New York Dr Goodfriend is the former director of obstetrics and gynecology at Lebanon Hospital and Morrisania Hospital, and attending obstetrician at Jewish Memorial Hospital, New York City He is chairman of the board of trustees at the Bronx County Medical Society and chairman of the Committee on Public Health at the New York Academy of Medicine He has also served as clinical professor of obstetrics at the New York Medical College —Dr Frederick S Reiss, associate clinical professor of dermatology, New York University Post-Graduate Medical School, has, on the invitation of the Greek Dermatological Society, delivered a lecture on "Recent Advances in Dermatotherapy in the United States of America" He also was elected honorary member of the society

Ghanaian Students Work at Medical Center —What amounts to an informal understanding between the State University of New York's Downstate Medical Center in Brooklyn and a small group of Ghanaian students took another step forward recently when Kwaku Kwateng became the third in a row from his country to assume the duties of Medical Center stock assistant while continuing his education at night Each boy in turn has recommended his successor for the Medical Center post The first of the group, hired by the Medical Center in 1955, was Yaw Manu Mr Manu came to the United States in 1949 and earned a bachelor of arts degree in political science from Berea College, Ky He then transferred to New York University, where he received his master of arts degree in political science in 1958, and where he is completing his doctoral thesis in government Mr Manu's successor was Anthony Mensah, who came to this country in 1956 under a Ghana Government Scholarship, earned his bachelor of arts degree in economics from the University of California in 1959 and his master of arts degree in industrial relations from New York University's Graduate School of Business Administration last June Mr Mensah planned to enter law school in England this fall but has been called back by the Ghana government to fill a post at home Mr Kwateng, the present incumbent, plans to study at night and hopes that in 10 years he will return to Ghana with a master's degree in economics

PENNSYLVANIA

Hospital Celebrates Centennial —The Lankenau Hospital, Philadelphia, held its centennial ceremonies on April 24 For the first 50 years the German Hospital, as it was then called, was closely identified with Germany, its charter specifying that all personnel "speak German with facility" Deaconesses who staffed the nursing service were German-born, and most of the medical staff finished their training in Munich or Vienna As anti-German sentiment grew during World War I, the name of the hospital was changed in 1917 to the Lankenau Hospital

Philadelphia

Annual Pemberton Lecture Given —The tenth annual Pemberton Memorial Lecture was given Oct 12 on "Connective Tissue Diseases—A New Experimental Approach" by Dr Charley J Smyth, associate professor of medicine, University of Colorado, and editor of *Rheumatism Review* The lectureship is presented under the joint sponsorship of the Eastern Pennsylvania Chapter of the Arthritis and Rheumatism Foundation, the Philadelphia Rheumatism Society, and the Arthritis Section of the Philadelphia County Medical Society

Dr Harris Named Department Head —Dr Henry W Harris has been named professor and chairman of the department of medicine at the Women's Medical College of Pennsylvania, it was announced by president and dean, Marion S Fay, Ph D Dr Harris received his medical degree from Harvard Medical School in 1943 Since 1955 he has been associate professor of medicine and head of the pulmonary disease division at the University of Utah College of Medicine, Salt Lake City, and chief of the pulmonary disease service of the Veterans' Administration Hospital in that city Dr Harris is certified by the American Board of Internal Medicine and by the Pulmonary Disease Subspecialty Board He is chairman of the committee on diagnostic standards in nontuberculous respiratory diseases of the American Thoracic Society, and is councilor at large of the American Thoracic Society

TEXAS

Report on University Research Grants —Research grants and contracts negotiated by the Medical

Branch of the University of Texas during the past year totaled a record high of $1,775,900 41, it was announced Sept 11 by Dr John B Truslow, Galveston, executive dean and director Reporting on the 12-month period ending June 30, D Bailey Calvin, Ph D, director of grants and contracts, noted that the School of Nursing were recipients of grants from government or private sources, or both Departments receiving more than $200,000 in research grants were anatomy, internal medicine, and pathology Two departments, surgery and neurology and psychiatry, received more than $100,000, as did the School of Nursing Government grants negotiated during the year rose by $264,590 to a new high of $1,375,028 compared with $1,110,438 in the 1958-1959 period A comparable increase was reported in grants from 51 private sources, rising $77,082 to another record high of $400,871 The previous year's private grant total was $323,798 The grants numbered 175 and were awarded to the Medical Branch in the name of 71 individual investigators, plus more than a dozen to the Research and Fellowship Committees They varied from $250 to $50,000

GENERAL

Hemophilia Foundation Dinner-Dance —The annual dinner dance of the Midwest Chapter of the National Hemophilia Foundation will be held at the Midland Hotel, Chicago, Oct 22 For dinner tickets, price $6 each, or admission tickets for dance only, price $5 per couple, write National Hemophilia Foundation, 141 W Jackson Boulevard, Chicago 4

Rheumatism Society Meeting in Seattle —The annual meeting of the Northwest Rheumatism Society will be held at the Washington Athletic Club, Seattle, Oct 28-29 The program will include the following guest speakers Dr Russell Cecil, New York, Dr Charley J Smyth, Denver, and Dr Lewis H Sarett, Rahway, N J, in addition to some 20 papers dealing with all aspects of rheumatic diseases Dr Cecil will be the guest speaker at the banquet, when he will present Seven Ages of Arthritis" For information write Division of Postgraduate Medical Education, University of Washington, Seattle

"Cleaner Air Week"—'Cleaner Air Week,' which has won the endorsement of President Eisenhower and of civic, government, and industrial leaders throughout the nation, is broadening its horizons this year Sponsor of this drive to focus attention on the nation's search for better air is the Air Pollution Control Association, whose headquarters are at Mellon Institute, Pittsburgh A P C A promises a greatly expanded range of activity during this year's Cleaner Air Week, which begings Oct 23, and appeals to all elements of our society to take interest in the observance The local objectives of the campaign are understanding of the community's air pollution control problems, awareness of pollution control progress, and acceptance of the community-wide approach to air pollution control

Chest Physicians Meet in Washington —The American College of Chest Physicians will hold its annual interim session at the Shoreham Hotel, Washington, D C, Nov 26-28 Dr Mathew J Flipse, Miami, Fla, president of the college, will preside Dr Joseph W Peabody Jr, Washington, D C, and his committee have arranged the scientific program which will include symposia on Congenital Bronchopulmonary Disorders, The Role of Steroid Therapy in Chest Diseases, and Current Therapeutic Issues A highlight of the program will be the Fireside Conferences on Sunday evening In addition there will be three round table luncheon discussions which will feature prominent speakers discussing various aspects of heart and lung diseases

Midwest Forum on Allergy —The annual meeting of the Midwest Allergy Forum will be held at the Penn Sheraton Hotel, Pittsburgh, Oct 22-23 Three panel discussions are planned Chronic Urticaria," 'Drug Allergy," and Respiratory Therapy" The program will include the following papers

- Bronchial Asthma, Dr Max Samter, Oak Park, Ill
- Management of Infection in Asthma, Dr Abraham I Braude, Dallas Texas
- Auto-Immune Glandular Disease, Dr Jack D Myers, Pittsburgh
- Physiological and Clinical Consequences of Respiratory Obstruction, Dr Eugene D Robin, Boston

The Pittsburgh Allergy Society is the host group for the meeting For information, write Dr Macy I Levine, 3347 Forbes Ave, Pittsburgh 13, Chairman, Committee on Arrangements

Election Day Closing of Doctors' Offices —A movement urging all doctors to close their offices for at least a portion of election day has been initiated by the Medical Association of Georgia A great deal of good could be accomplished if all doctors would close their offices for the entire day on Nov 8, or at least a designated period during that day, states an editorial in the *Journal of the Medical Association of Georgia* The purpose of such an observance of election day,' it adds, 'would make it possible for the physician, his aides, and his patients to go to the polls on this crucial day Not only would closing of doctors' offices facilitate voting but it would point up for all to see the intense interest all doctors share in the future of our country" Posters outlining the election day schedule of closing have been sent to all members of the association for display in their offices Emergency needs would continue to be served and scheduled operations would proceed without interruption

Prevalence of Poliomyelitis.—According to the National Office of Vital Statistics, the following number of reported cases of poliomyelitis occurred in the United States, its territories and possessions in the weeks ended as indicated:

Area	Sept 24, 1960 Paralytic Type	Sept 24, 1960 Total Cases	Sept 26, 1959 Total
New England States			
Maine	9	9	15
New Hampshire			1
Vermont	1	1	
Massachusetts			10
Rhode Island			2
Connecticut	4	4	4
Middle Atlantic States			
New York	10	22	32
New Jersey	2	4	17
Pennsylvania	6	9	15
East North Central States			
Ohio	6	13	19
Indiana	6	9	10
Illinois	10	12	20
Michigan	2	3	29
Wisconsin	1	4	2
West North Central States			
Minnesota	1	1	18
Iowa	1	5	21
Missouri	3	4	32
North Dakota			1
South Dakota			1
Nebraska		1	5
Kansas			10
South Atlantic States			
Delaware			
Maryland	16	17	5
District of Columbia			
Virginia	2	2	22
West Virginia	2	3	10
North Carolina	1	2	10
South Carolina	6	6	5
Georgia	1	1	6
Florida	2	2	5
East South Central States			
Kentucky		20	13
Tennessee	6	7	14
Alabama	2	2	12
Mississippi	1	1	6
West South Central States			
Arkansas	3	3	20
Louisiana	3	4	3
Oklahoma			7
Texas	3	5	27
Mountain States			
Montana	1	1	
Idaho			
Wyoming			
Colorado	2	2	1
New Mexico			3
Arizona			5
Utah			
Nevada			
Pacific States			
Washington	3	3	10
Oregon	1	2	6
California	14	17	20
Alaska			1
Hawaii			
Territories and Possessions			
Puerto Rico	16	16	
Total	147	217	475

Fellowships for American Women.—The American Association of University Women Educational Foundation announces that the closing date for receipt of completed applications for fellowships for 1961-1962 is Dec 1, 1960 Notification of awards will be made Mar 1, 1961 One Founders Fellowship of $5,000, four fellowships of $4 000, ten of $3,000, and 25 of $2,000/$2,500 are being offered to women of the U S A who hold the doctorate, or who will have fulfilled all the requirements for the doctorate, except the dissertation, by the time the fellowship year begins, or who have attained professional recognition There are no restrictions as to age or field, and the fellowships may be used abroad or in the U S A For information, write Fellowships Office, AAUW Educational Foundation, 2401 Virginia Ave, N W, Washington 7, D C

Temporal Bone Banks Established.—The Deafness Research Foundation's temporal bone banks program, which creates a channel through which deaf persons may will their inner ear structures to science, was established on June 30, 1960, with a pilot unit at the University of Chicago Medical School under the direction of Dr John R Lindsay At the Foundation's Second Annual Achievement Awards Luncheon held at the Waldorf-Astoria Hotel, New York, Mrs Hobart C Ramsey, founder and president of the Deafness Research Foundation, announced that second and third units are now located at Johns Hopkins Medical School, under the direction of Dr John E Bordley, and at the University of Michigan School of Medicine, under the direction of Merle Lawrence, Ph D The Foundation's scientific advisers hope that at least twelve such units will be functioning in laboratories throughout the country within the next year

Health Research Fellowships.—Facts about fellowships for health research provided by federal and nongovernmental agencies are available in a single report, "Fellowships for Health Research," issued by the National Health Council Based on a meeting of the council's Committee on Research, the report contains information about the fellowship and traineeship programs of 4 federal and 22 nongovernmental agencies Opportunities for advanced education available through the National Research Council, the National Science Foundation, the Office of Education (National Defense Education Act), and the U S Public Health Service are described A tabulation of nongovernmental fellowships includes information on fellowships obtainable from voluntary health agencies, foundations, and insurance and pharmaceutical organizations The report gives details of types of research fellowships, eligibility, amount of awards, length of time for which fellowships are awarded, location of training and time schedule for applications Copies of "Fel-

lowships for Health Research' may be purchased from the National Health Council, 1790 Broadway, New York 19, N Y—price, $1

Society News—At the annual meeting of the Society of Nuclear Medicine the following officers were elected president, Titus C Evans, Ph D, Iowa City, president-elect, Dr Lindon Seed, Chicago, vice-president, Dr Paul M Meadows, Pittsburgh, vice-president-elect, Dr James R Maxfield Jr, Dallas, Texas, secretary, Dr Robert W Lackey, Denver, treasurer, Dr William H Beierwaltes, Ann Arbor, Mich, historian, Dr Asa E Seeds, Baltimore Edward Teller, Ph D, director of the Radiation Laboratory, University of California, presented the first of the annual series of lectures dedicated to pioneers in nuclear medicine in honor of Ernest O Lawrence, Ph D, Berkeley, Calif —— The **Rocky Mountain Radiological Society** has elected the following officers for 1960-1961 president-elect, Dr Thomas J Kennedy, Denver, first vice-president, Dr John F Bacon, Ames, Iowa, second vice-president, Dr Marcus J Smith, Santa Fe, N M, secretary-treasurer, Dr John H Freed, Denver, executive committee, Dr Grant P Raitt, Billings, Mont, program committee, Dr Galen M Tice, Kansas City, Kan, councilor, American College of Radiology, Dr Ralph C Moore, Omaha —At the annual meeting of the **American Congress of Physical Medicine and Rehabilitation** the following officers were elected for 1960-1961 president, Dr Donald A Covalt, New York City, secretary, Dr Joseph G Benton, Brooklyn, executive director, Dr Glenn Gullickson Jr, Minneapolis, executive secretary, Mrs Dorothea C Augustin, Chicago

Report on Poliomyelitis—The Public Health Service reported in its Morbidity and Mortality Weekly Report for Sept 30 that the total number of cases of poliomyelitis reported for the week ended Sept 24 was 201, of which 131 were paralytic cases This is a substantial increase over the revised figures for the previous week—a total of 176 cases including 114 paralytic For the week ended Sept 26, 1959, the total was 475 cases, of which 315 were paralytic The 131 paralytic cases for the week of Sept 24 is the highest number reported in any week this year The previous high week ended Sept 3, with a revised figure of 121 paralytic cases For that week, the total number of cases was 218 It cannot be stated whether or not the 1960 peak week for paralytic cases has been reached In the preceding 6 years, the peak was reached in the 34th week once (1955), and 37th week three times (1956, 1958, and 1959), the 38th week once (1954), and the 39th week once (1957) For the current week, Maryland reported the largest number of paralytic cases (16) Twelve of these occurred in Baltimore where the majority of cases this summer have been occurring in low socioeconomic areas in two different parts of the city Most of the cases have been in nonwhite individuals All isolations of poliovirus in Baltimore have been type III Other states which reported 9 or more paralytic cases were California (14), Illinois and New York (10 each), and Maine (9) Twenty cases unspecified as to paralytic status were reported in Kentucky About a fourth of the cases reported in upstate New York have been occurring in Cattaraugus County Two deaths were reported—one each in California and Illinois The Los Angeles City Health Department reported that the incidence of paralytic poliomyelitis through 36 weeks of 1960 was higher than for the comparable period of any year since 1956 During the past 10 years, the peak incidence usually occurred during the last half of September, although a high incidence occurred as late as mid-December in several years of the early 1950s

DEATHS IN OTHER COUNTRIES

Sir Harold Gillies—Sir Harold Delf Gillies, known as the father of plastic surgery in Britain, died on Sept 11 He was 78 years of age Born in Dunedin, New Zealand, Sir Harold went to Britain in 1903 to study at Cambridge University, and after leaving Cambridge he continued his medical training at St Bartholomew's Hospital, London At the outbreak of World War I Sir Harold went to France with the Royal Army Medical Corps and soon afterward obtained leave to study face surgery in Paris He performed operations on more than 10,000 soldiers, sailors, and airmen whose features were disfigured He was knighted by King George V in 1930 for 'valuable services in the treatment of facial disfigurement Among Sir Harold's many prominent patients was King Leopold of Belgium, who suffered facial injuries in an automobile crash in 1935 He performed plastic surgery on civilians injured in accidents, children with congenital abnormalities, and women who simply wanted their faces improved

Dr U B Narayanrao—Dr U B Narayanrao, editor and founder of *Medical Digest* and the *Indian Journal of Dermatology and Venereology*, died on June 14, at the age of 65 years Dr Narayanrao was born at Udyawar in South Kanara and went to school in his home village After matriculation he went to Calcutta where he decided on his future medical career He proceeded to Hyderabad, Sind, where he took his L C P S diploma and then joined the Bombay Government Service After a short period Dr Narayanrao left this post to set up a private practice in Girgaum In 1933 he started the monthly magazine *Medical Digest* as a means for conducting the struggle of the licentiates to obtain better conditions in government service and elsewhere As general secretary of the All India Medical Licentiates' Association, he fought for the amalgamation of the association and the Indian

Medical Association. Although he did not succeed, he brought them closer together than ever before. In 1935 Dr. Narayanrao started the *Indian Journal of Venereal Diseases and Dermatology*, the first of its kind in India. As an elected member of the Bombay Medical Council, a position he held from 1938 until his death, he worked for the interests of the medical profession in general, fought for democratizing the Medical Council, and for the establishment of a standard of medical education for the country. As a result of his efforts, the L.C.P.S. course has been abolished and there is one uniform medical education for all India.

EXAMINATIONS AND LICENSURE

EDUCATIONAL COUNCIL FOR FOREIGN MEDICAL GRADUATES, INC.

Educational Council for Foreign Medical Graduates. Stations around the world. April 4. Closing date for filing applications is Jan. 4. Exec. Director, Dr. Dean F. Smiley, 1710 Orrington Ave., Evanston, Ill.

BOARDS OF MEDICAL EXAMINERS

ALABAMA. *Examination.* Montgomery, June 20-21. *Reciprocity.* Continuously. Sec., Dr. D. G. Gill, State Office Bldg., Montgomery 4.

ARKANSAS. * *Examination and Reciprocity.* Little Rock, Nov. 10-11. Sec., Dr. Joe Verser, Harrisburg.

ALASKA. * On application in Anchorage or Fairbanks. Sec., Dr. W. M. Whitehead, 172 South Franklin St., Juneau.

CALIFORNIA. *Written.* Sacramento, Oct. 17-20. *Oral and Clinical.* Los Angeles, Nov. 20. *Oral for Reciprocity Applicants.* Los Angeles, Nov. 19. Sec., Dr. Louis E. Jones, Room 536, 1020 N. Street, Sacramento.

CANAL ZONE. On Application. Acting Sec., Dr. B. K. Levin, Health Bureau, Balboa Heights.

COLORADO. * *Examination.* Denver, Dec. 13-14. *Reciprocity.* Denver, Oct. 11. Exec. Sec., Miss Mary M. McConnell, 715 Republic Bldg., Denver 2.

CONNECTICUT. * *Examination.* Hartford, Nov. 8-10. *Endorsement.* New Haven, Nov. 30. Sec., Dr. Stanley B. Weld, 160 St. Ronan St., New Haven. *Homeopathic Examination.* Derby, Oct. 18. Sec., Dr. Donald A. Davis, Derby.

DELAWARE. *Examination.* Dover, Jan. 10-12. *Endorsement.* Dover, Jan. 19. Sec., Dr. Joseph S. McDaniel, Professional Bldg., Dover.

DISTRICT OF COLUMBIA. * *Examination.* Washington, Dec. 12-13. *Reciprocity and Endorsement.* Continuously. Deputy Director, Department of Occupations and Professions, Mr. Paul Foley, 1740 Massachusetts Ave. N.W., Washington 6.

FLORIDA. * *Examination.* Miami Beach, Nov. 20-22. *No Reciprocity.* Sec., Dr. Homer L. Pearson, 901 N.W. 17th St., Miami 36.

GUAM. *Subject to Call.* Sec., Dr. F. L. Conklin, Agana.

HAWAII. *Examination.* Honolulu, Jan. 9-10. *Reciprocity.* Continuously. Sec., Dr. Harry L. Arnold, Jr., 1000 Ward Ave., Honolulu.

IDAHO. *Examination and Endorsement.* Boise, Jan. 9-11. Sec., Mr. Armand L. Bird, 358 Sonna Bldg., Boise.

INDIANA. *Examination.* Indianapolis, June 20-22. *Endorsement.* Indianapolis, fourth Wednesday each month. Exec. Sec., Miss Ruth Kirk, 538 K of P Bldg., Indianapolis.

KANSAS. * *Examination.* Kansas City, Jan. 19-20. *Reciprocity.* Kansas City, Jan. 21. Sec., Dr. F. J. Nash, New Brotherhood Bldg., Kansas City.

KENTUCKY. *Examination.* Louisville, Dec. 12-13. *Reciprocity.* Continuously. Sec., Dr. Russell E. Teague, 620 South Third St., Louisville 2.

LOUISIANA. *Examination and Reciprocity.* New Orleans, Dec. 8-10. Sec., Dr. Edwin H. Lawson, 930 Hibernia Bank Bldg., New Orleans.

MAINE. *Examination and Reciprocity.* Brunswick, Nov. 1-3. Sec., Dr. Daniel F. Hanley, Box 637, Brunswick.

MARYLAND. *Examination.* Baltimore, June 13-16 (Tentative). Sec., Dr. Frank K. Morris, 1211 Cathedral St., Baltimore 1.

MASSACHUSETTS. *Examination.* Boston, January. *Reciprocity.* Continuously. Sec., Dr. David W. Wallwork, Room 37, State House, Boston 33.

MICHIGAN. * *Examination.* Lansing, Oct. 24-26. *Reciprocity.* Continuously. Exec. Sec., Dr. E. C. Swanson, 118 Stevens T. Mason Bldg., West Michigan Ave., Lansing 8.

MINNESOTA. * *Examination.* Minneapolis, Oct. 18-20. *Reciprocity.* November. Sec., Dr. J. P. Medelman, 230 Lowry Medical Arts Bldg., St. Paul 2.

MISSISSIPPI. *Endorsement.* Jackson, Dec. 5. Sec., Dr. A. L. Gray, State Board of Health, Jackson.

NEBRASKA. * *Examination.* Omaha, June. Director, Bureau of Examining Boards, Mr. R. K. Kirkman, Room 1009, State Capitol Bldg., Lincoln 9.

NEVADA. *Examination and Reciprocity.* Reno, Dec. 7. Sec., Dr. G. H. Ross, 112 North Curry St., Carson City.

NEW JERSEY. *Examination.* Trenton, Oct. 18-21. *Reciprocity.* Continuously. Sec., Dr. Royal A. Schaaf, 28 West State St., Trenton.

NEW MEXICO. * *Examination and Reciprocity.* Santa Fe, Nov. 21-22. Sec., Dr. R. C. Derbyshire, 227 East Palace Ave., Santa Fe.

NEW YORK. *Examination.* Albany, Buffalo, New York, Rochester and Syracuse, Dec. 6-9. Sec., Dr. Stiles D. Ezell, State Education Bldg., Albany.

NORTH DAKOTA. *Examination.* Grand Forks, Jan. 11-13. *Reciprocity.* Grand Forks, Jan. 14. Sec., Dr. C. J. Glaspel, Box 228, Grafton.

OHIO. *Examination.* Columbus, Dec. 12-14. *Endorsement.* Columbus, Oct. 4. Sec., Dr. H. M. Platter, 21 W. Broad St., Columbus 15.

OREGON. * *Reciprocity.* Quarterly. Exec. Sec., Mr. Howard I. Bobbitt, 609 Failing Bldg., Portland.

PENNSYLVANIA. *Examination.* Philadelphia, January. *Endorsement.* Continuously. Sec., Mrs. Margaret G. Steiner, Box 911, Harrisburg.

SOUTH CAROLINA. *Examination and Reciprocity.* Columbia, Dec. 13-14. Sec., Dr. Harold E. Jervey, Jr., 1329 Blanding St., Columbia, South Carolina.

SOUTH DAKOTA. * *Examination.* Sioux Falls, Jan. 16-17. *Reciprocity.* Continuously. Exec. Sec., Mr. John C. Foster, 711 N. Lake Ave., Sioux Falls.

TEXAS. * *Examination.* Fort Worth, Dec. 1-3. *Reciprocity.* Fort Worth, Dec. 1-3. Sec., Dr. M. H. Crabb, 1714 Medical Arts Bldg., Fort Worth.

UTAH. *Examination.* Salt Lake City, July 5-7. Sec., Mr. Frank E. Lees, 324 State Capitol Bldg., Salt Lake City 1.

VIRGINIA. *Examination and Reciprocity.* Richmond, Nov. 29-Dec. 2. Sec., Dr. R. M. Cox, Portsmouth.

VIRGIN ISLANDS. *Examination.* Charlotte Amalie, Nov. 9-10. Sec., Dr. Benjamin A. Nath, Charlotte Amalie, St. Thomas.

WASHINGTON. * *Reciprocity.* Continuously. Administrator, Mr. Thomas A. Carter, Capitol Bldg., Olympia.

WEST VIRGINIA. *Examination.* Charleston, Jan. 1961. *Reciprocity.* Charleston, Oct. 3. Sec., Dr. Newman H. Dyer, State Office Bldg., No. 3, Charleston 5.

WISCONSIN. * *Examination.* Madison, Jan. 10-12. *Reciprocity.* Madison, Oct. 14. Sec., Dr. Thomas W. Tormey, Jr., 115 South Pinckney St., Madison.

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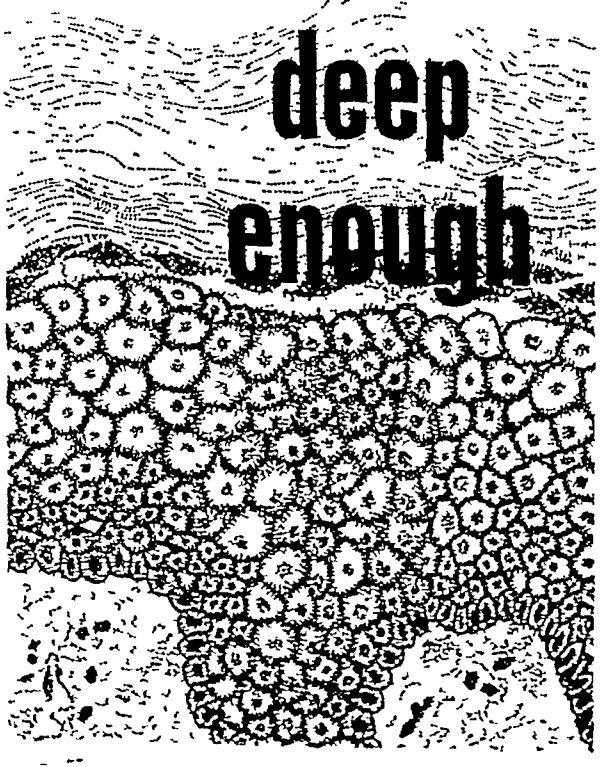

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MEETINGS

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1960 Clinical Meeting, Washington, D C, Nov 28-Dec 1
1961 Annual Meeting, New York City, June 26-30
1961 Clinical Meeting, Denver, Nov 27-30
1962 Annual Meeting, Chicago, June 11-15
1962 Clinical Meeting, Los Angeles, Nov 26-29
1963 Annual Meeting, Atlantic City

AMERICAN

1960

October

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AMERICAN ACADEMY OF PEDIATRICS Palmer House, Chicago Oct 17-20 Dr E H Christopherson, 1801 Hinman Ave Evanston Ill, Executive Director

AMERICAN ASSOCIATION OF POISON CONTROL CENTERS Palmer House Chicago, Oct 18 Dr Harry C Shirkey, 712 S 30th St Birmingham Ala Chairman, Program Committee

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1961

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Infectious Hepatitis

Studies on the Effect of Gamma Globulin and on the Incidence of Inapparent Infection

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The effect of gamma globulin in the prevention of infectious hepatitis was studied in four controlled trials in an institution where the disease was highly endemic In the first trial a single dose of 0 01 ml per pound of body weight was followed by a two and one half-fold reduction in incidence of hepatitis with jaundice in a group of patients, predominantly children When the same dose was given simultaneously to adult hospital attendants, it was ineffective In the second and third trials inoculation of 0 06 ml of gamma globulin per pound of body weight was followed by a tenfold and thirtyfold reduced incidence of overt jaundice In a fourth trial a small group of newly admitted patients was studied intensively for subclinical infection Under the conditions of this trial clinically inapparent hepatitis occurred in spite of gamma globulin The ratio of subclinical anicteric hepatitis to overt jaundice was 12 1

THE efficacy of gamma globulin in the control of infectious hepatitis with jaundice has been clearly established in studies by Stokes and Neefe,[1] Havens and Paul,[2] Gellis and co-workers,[3] Stokes and colleagues[4] and others[5,6] In the earlier studies[1,2] the dose of gamma globulin was relatively high, ranging from 0 15 ml to 0 08 ml per pound of body weight Later, doses from 0 06 ml to as little as 0 01 ml per pound of body weight were shown to be effective[4,5]

The passive protection conferred by gamma globulin probably wanes by six to eight weeks However, in a study of three institutional epidemics of infectious hepatitis Stokes and associates[4] reported prolonged protection for at least five, eight, and nine months, respectively This phenomenon was considered by Stokes to be due to passive-active immunization He postulated that continued exposure to the virus during the period of waning passive immunity resulted in subclinical infectious hepatitis In this manner active immunity was superimposed on passive immunity

During the past seven years infectious hepatitis has been endemic at the Willowbrook State School,

From the Department of Pediatrics New York University School of Medicine and the Willowbrook State School Staten Island Dr Ward is now with the Department of Pediatrics University of Southern California Los Angeles

an institution for mentally defective children on Staten Island, N Y This outbreak proved difficult to control because of at least three factors (1) the opportunity for wide dissemination of virus in a closed institution in which there was intimate contact between patients, (2) the presence of many

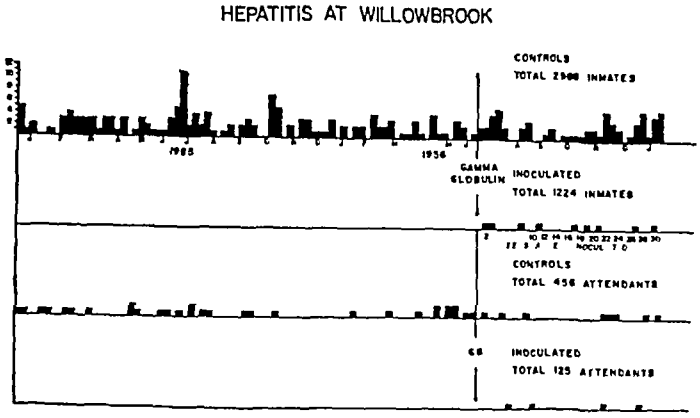

Fig 1 —Occurrence of cases of hepatitis with jaundice before and after first trial of gamma globulin in inmates (upper half) and attendants (lower half) Each black square represents one case of hepatitis with jaundice

cases of inapparent infectious hepatitis, and (3) the continued introduction of susceptible individuals because of the necessity of admitting new patients at a fairly constant rate

The endemic situation at Willowbrook afforded an unusual opportunity to study the protective effect of gamma globulin and to determine the incidence of inapparent infection The purpose of the present report is to describe four separate trials of the effect of gamma globulin on the incidence of hepatitis in this institution The first and second trials, reported previously,[7,8] will be discussed with additional details in this paper as a logical background for the third and fourth trials This report will also include observations on the frequency of inapparent infectious hepatitis and on the occurrence of second attacks

First Trial of Gamma Globulin

The first trial of gamma globulin was a large-scale immunization program which was initiated on June 25 and 26, 1956 The occurrence of hepatitis with jaundice in patients and in attendant personnel is illustrated in figure 1 From Jan 1, 1955, to June 25, 1956, overt hepatitis was detected in 108 patients and 31 employees On June 25 and 26, 1956, gamma globulin in a dose of 0 01 ml per pound of body weight was administered to approximately one-third of the patients in each of 18 buildings The gamma globulin and control groups were comparable in age, sex, and duration of stay (exposure to hepatitis) in the institution The control group consisted of 2,988 inmates as compared with 1,224 in the inoculated group The employees were offered gamma globulin in the same dosage on an elective basis Only 125 attendants accepted, while 456 refused the inoculation All persons with a history of hepatitis were eliminated from the study

The following procedure was employed for the detection of cases of hepatitis in both the gamma globulin and uninoculated control groups Any patient with obvious jaundice, gastrointestinal symptoms, or dark urine was referred by a Willowbrook staff physician to a hepatitis ward A member of our group (J P G) examined and bled all suspect persons Each diagnosis was confirmed by the following biochemical tests of liver function serum bilirubin, thymol turbidity, cephaline flocculation, and serum glutamic oxaloacetic transaminase (SGO-T) Under the conditions of this study, therefore, only overt cases of hepatitis with jaundice were recognized Anicteric or minimally icteric asymptomatic cases were not detected

Results —The results for the seven-month period following a single inoculation of gamma globulin are presented in figure 1 and table 1 Hepatitis with jaundice was detected in 70 patients, 61 cases (20 4 per 1,000) occurred in the control group as compared with 9 cases (7 4 per 1,000) in the gamma globulin group Overt hepatitis was contracted by 12 attendants, 8 were uninoculated and 4 received gamma globulin The attack rate per 1,000 was 17 5 for the control group and 32 for the inoculated group

Comment —In this first trial the attack rate in the inoculated group was nearly two and one half times lower than in the controls Although this represented a significant reduction in the frequency of overt hepatitis, these results were not as impressive as those reported by others[4] As indicated in figure 1 the decreased incidence of hepatitis persisted for the entire seven-month period

Under the conditions of this study, gamma globulin in a dose of 0 01 ml per pound of body weight was not protective for the attendants In fact, the attack rate of the gamma globulin group was about double that of the control group

TABLE 1 —*First Trial of Gamma Globulin*

Group		No in Study	Hepatitis with Jaundice: No of Cases	Hepatitis with Jaundice: Rate/1,000†
Inmates	Uninoculated	2 988	61	20 4
	Inoculated*	1 224	9	7 4
Attendants	Uninoculated	456	8	17.5
	Inoculated*	125	4	32

* Gamma globulin 0 01 ml /lb of body weight administered in a single dose on June 25, 1957
† For a seven month period after gamma globulin

The contradictory results, indicating protection of patients and lack of protection of attendants, may have been due to the difference in age distribution The patients were predominantly children and the attendants were all adults Hepatitis is notoriously a more severe disease in adults than in children Perhaps, under the conditions existing at

Willowbrook, a dose of 0 01 ml per pound of body weight may have been adequate for the prevention of the mild childhood disease but inadequate for the adult type

In view of the contradictory results of the first trial, it seemed desirable to initiate a second trial in which a larger dose of gamma globulin would be administered

Second Trial of Gamma Globulin

The second trial of gamma globulin included all the control patients of the first trial plus all patients admitted between June 25, 1956, and Jan 24, 1957 On the latter date, gamma globulin, 0 06 ml per pound of body weight was administered to 1,182 patients A comparable group of 1,771 patients were uninoculated controls The criteria for detection of hepatitis with jaundice were the same as those employed for the first trial The patients were observed for a period of two years At the end of the first year, the following patients were eliminated from the study those who contracted hepatitis and

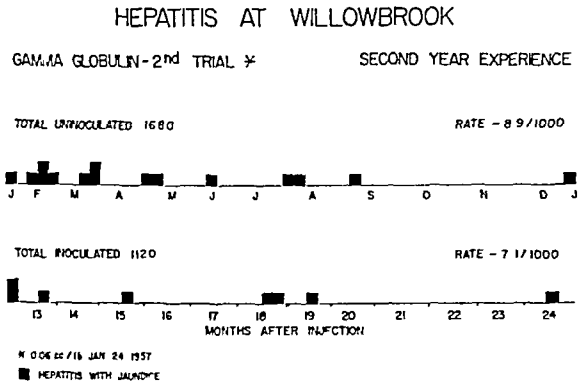

Fig 2 —Occurrence of cases of hepatitis with jaundice during first year of second trial of gamma globulin Each black square represents one case of hepatitis with jaundice

those who were discharged from the institution

Results—The results of the first year experience (Jan 25, 1957, to Jan 24, 1958) are presented in figure 2 and table 2 Hepatitis with jaundice was observed in 39 of 1,771 control patients as compared with 3 of 1,182 inoculated inmates during the first year following a single injection of gamma globulin The yearly rates per 1,000 were 22 5 and 2 5, respectively The cases of hepatitis in the gamma globulin group occurred 5, 12, and 50 weeks following inoculation As indicated in figure 2, cases of hepatitis in the control group were detected continuously throughout the entire year

The results of the second year experience (Jan 25, 1958, to Jan 24, 1959) are shown in figure 3 and table 2 Hepatitis with jaundice was observed in 15 of 1,680 control patients as compared with 8 of 1,120 patients who received gamma globulin The yearly rates per 1,000 were 8 9 and 7 1 respectively As illustrated in figure 3, cases of hepatitis were observed with equal frequency at similar intervals throughout the entire second year

Comment—Under the conditions of this study at Willowbrook a single injection of gamma globulin in a dose of 0 06 ml per pound of body weight was

TABLE 2 —*Second Trial of Gamma Globulin*

Period Yr	Group	No of Inmates	Hepatitis with Jaundice: No of Cases	Hepatitis with Jaundice: Rate/1 000
First	Control	1 771	39	22 0
	Gamma globulin*	1 182	3	2 5
Second	Control	1 680	15	8 9
	Gamma globulin*	1 120	8	7 1

*Gamma globulin 0 6 ml /lb of body weight administered in a single dose on Jan 24 1957

followed by (1) a significantly reduced incidence of overt hepatitis (about tenfold), and (2) prolonged protection against hepatitis with jaundice (about one year) These observations were similar to findings reported by Stokes and associates who suggested passive-active immunity to explain this phenomenon

During the second year the incidence of overt hepatitis was about the same in both groups The apparent lack of protection may have been due to at least two factors (1) delayed exposure to an infective dose of virus and (2) the occurrence of second attacks of hepatitis An epidemiologic survey of 275 cases of hepatitis at Willowbrook, revealed that about 60 per cent of the cases occurred within the first year of admission to the institution, about 15 per cent occurred during the second year [7]

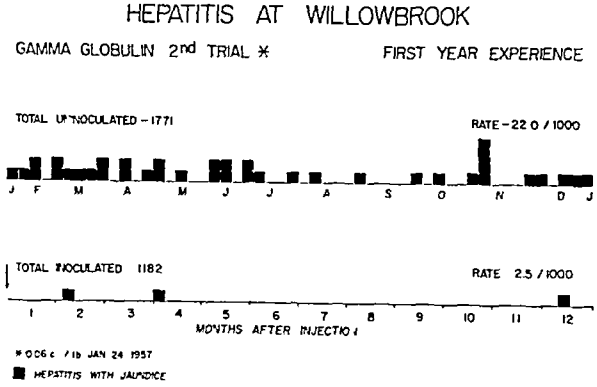

Fig 3 —Occurrence of cases of hepatitis with jaundice during second year of second trial of gamma globulin

Any patient who avoided infection during the first year, would obviously have had no protection from the initial inoculation of gamma globulin given a year before

The epidemiologic survey also indicated that 40 per cent of the 275 cases of overt hepatitis occurred more than one year after admission to the institution How could this group have possibly avoided

earlier exposure to the virus under the highly endemic conditions which existed at Willowbrook? A possible answer to this puzzling question may be found in the phenomenon of second attacks of hepatitis As will be shown later in this report, second attacks were observed in about four to eight per cent of the patients who contracted hepatitis at Willowbrook Accordingly, it seems reasonable to postulate that some of the cases of overt hepatitis observed during the second year may have represented second infections The initial episode may have been either an overt infection with jaundice or a subclinical anicteric infection

As indicated earlier, the patients observed in first and second trials of gamma globulin were resident in the institution for variable periods up to the date of inoculation The duration of time between admission to the institution and the beginning of each trial ranged between one day and about four or more years Consequently, at the time of administration of gamma globulin, a large proportion of individuals in the control and inoculated groups were probably immune to infectious hepatitis It seemed logical, therefore, to extend our studies of gamma globulin by initiating a third trial in which alternate newly admitted patients to the institution would be inoculated

TABLE 3 —*Third Trial of Gamma Globulin*

Group	No in Study	No of Cases of Hepatitis with Jaundice		
		<5 Months*	>5 Months*	Total
Gamma globulin†	635	1	18	19
Control	636	31	18	49

* Interval between admission and onset of hepatitis
† 0 06 ml/lb of body weight in a single dose on admission to Willowbrook

Third Trial of Gamma Globulin

The third trial of gamma globulin was begun on Feb 1, 1958 During a two-year period ending Feb 1, 1960, alternate patients admitted to the Willowbrook State School received a single injection of gamma globulin, 0 06 ml per pound of body weight on the day of entry These patients were referred to various buildings in the institution In view of the endemic situation at that time, it was inevitable that there would be ample opportunity for natural exposure to cases of infectious hepatitis The criteria for diagnosis of hepatitis were the same as those employed in the first and second trials Consequently, only overt cases of hepatitis with jaundice were recognized Anicteric or minimally icteric, asymptomatic cases were for the most part not detected

During the two-year period 635 patients received gamma globulin, 636 patients were uninoculated controls Since the duration of a patient's stay in the institution ranged from one day to as long as two years, it was most important to determine the total experience of both groups as measured by number of "person-weeks" in Willowbrook The number of "person-weeks" was fairly comparable—30,600 for the gamma globulin group and 29,650 for the control group

Results —The results for the two-year period are presented in figure 4 and table 3 Hepatitis with jaundice was detected in 49 uninoculated patients as compared with 19 patients who received gamma globulin The decreased incidence of hepatitis with jaundice was limited to the five-month period following admission to the institution, 31 cases occurred in the control group as compared with only one case in the gamma globulin group In the interval between 5 and 24 months after admission to Willowbrook, hepatitis with jaundice occurred with equal frequency in both groups

Comment —The 5-month protective effect of gamma globulin in the third trial contrasted with a 12-month protective effect in the second trial The reason for this apparent discrepancy may possibly be due to the difference in the immune status of the patients in each trial Patients of the second trial had been in the institution for a variable period ranging between several years and one day before inoculation The third trial consisted of newly admitted patients, obviously a more susceptible group

The significantly decreased incidence of overt hepatitis for the five-month period following a single inoculation of gamma globulin may be attributed to either passive immunity only or combined passive-active immunity

To explain the prolonged protective effect on the basis of waning passive immunity would require a consideration of the following factors related to gamma globulin (1) the half life, (2) the minimally effective dose, and (3) the dose actually employed The half life of gamma globulin is about four weeks Adequate protection against icteric hepatitis has been achieved with a dose of 0 01 ml per pound in many studies The dose employed in this trial was 0 06 ml per pound of body weight Consequently, the protective effect of gamma globulin may persist for several months following an inoculation of the larger dose If this hypothesis were valid, the passively protected individuals should increase the number of susceptibles at risk in the gamma globulin group after the five-month period had elapsed Under these circumstances the incidence of hepatitis in the gamma globulin group should be higher than the control group during the 5 to 24-month period after the inoculation As indicated in table 3, this situation did not occur, the number of cases of overt hepatitis was identical for both groups

The hypothesis of passive-active immunization first suggested by Stokes and co-workers[4] is a more logical explanation for the prolonged protective effect of gamma globulin in the third trial In view of the design and limitations of the study, only

patients with obvious jaundice were detected, cases of anicteric or minimally icteric hepatitis were not recognized Consequently, hepatitis infection may have been present in many of the gamma globulin "protected patients during the first five-month period The apparent protective effect may have been due in part to an attenuating effect of gamma globulin converting overt hepatitis with jaundice to clinically inapparent infection In other words, the administration of gamma globulin under the conditions which existed at Willowbrook may have induced passive-active immunity

If the hypothesis of passive-active immunization were valid, it should be possible to detect subclinical infectious hepatitis in newly admitted Willowbrook patients inoculated with gamma globulin Accordingly, a fourth trial of gamma globulin was undertaken in an attempt to answer the following questions posed by the previous trials Does gamma globulin really prevent infection, or does

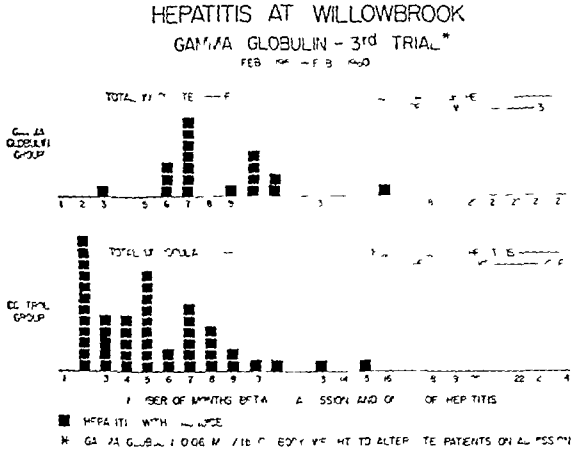

Fig 4 —Occurrence of cases of hepatitis with jaundice during third trial of gamma globulin Each black square represents one case of hepatitis with jaundice

it modify the disease so that it is clinically unrecognizable? What is the incidence of inapparent infection with or without gamma globulin?

Fourth Trial of Gamma Globulin

In a previous study it was demonstrated that subclinical infectious hepatitis could be detected with the aid of serial biochemical tests of liver function including SGO-T[9] Experience with the third trial of gamma globulin (fig 4) indicated that the greatest risk of acquiring hepatitis occurred during the first six months following admission to Willowbrook Consequently, it was postulated that valuable information could be obtained by an intensive study of a small group of patients for the six-month period following admission to the institution

In May, 1959, 38 consecutive newly admitted patients were included in the study Alternate admissions received gamma globulin 0 06 ml per pound of body weight Patients of both groups had a similar age distribution and they were sent to similar buildings Of the 38 patients, 17 received gamma globulin, 15 were uninoculated controls, and 6 were signed out before the study was completed

Each patient was bled on admission to the institution once weekly, and more frequently if indicated The following tests of liver function were performed SGO-T, thymol turbidity, and cephalin flocculation Test for serum bilirubin was performed if either the patient's appearance or the color of the serum suggested that icterus was present A diagnosis of hepatitis with jaundice was fulfilled by the following criteria evidence of clinical icterus associated with an abnormal serum bilirubin (more than 1 0 mg per 100 ml) and an abnormal SGO-T activity (more than 60 units) Criteria for a diagnosis of hepatitis without jaundice included a crescendolike rise in SGO-T activity associated with the development of an abnormal thymol turbidity from a normal baseline determination

The regular Willowbrook staff physicians and nurses responsible for the care of the patients were not aware of the details of the study This information was deliberately withheld to avoid the possibility of unconscious bias in the detection of overt cases of hepatitis with jaundice

Results—The results are shown in figure 5 and table 4 Of 17 patients who received gamma globulin, hepatitis was detected in 9, 3 with jaundice and 6 without jaundice The cases of hepatitis occurred during the following weeks after admission to the institution 5th, 11th, 18th, 19th, 20th (2 cases), 22nd, 23rd, and 26th

Of the 15 uninoculated control patients, hepatitis was also detected in 9, 3 with and 6 without jaundice Hepatitis occurred during the following weeks after admission to Willowbrook 9th, 10th, 12th, 13th, 15th (2 cases), 17th, 18th, and 20th

All of the above cases of hepatitis were detected with the aid of serial liver function tests which in most instances provided the first clue leading to the diagnosis The majority of the patients without jaundice were asymptomatic Jaundice, when present, was barely detectable

The 32 patients of this study were also observed by the Willowbrook staff physicians and nurses who were not aware of the results of the liver function tests Utilizing the same criteria outlined for the third trial of gamma globulin, the regular staff people recognized only *one* case of hepatitis with jaundice (patient no 1, table 4) The remaining 17 cases of hepatitis (5 with jaundice and 12 without) were unrecognized The patients of this study were dispersed among many other patients in the various buildings of the institution They were not selectively examined at periodic intervals by the

regular Willowbrook staff Consequently, only overt jaundice or constitutional symptoms would have aroused suspicion of possible hepatitis In contrast, members of our own research staff examined each patient selectively at the time of each bleeding

Comment—This study yielded interesting data which may provide answers to the questions related to both the effect of gamma globulin and the incidence of inapparent infections

Effect of Gamma Globulin—Of 627 inoculated patients in the third trial of gamma globulin only *one* was detected to have hepatitis with jaundice within the first five months of admission to Willowbrook In contrast, 8 of 17 patients inoculated with gamma globulin in the fourth trial were demonstrated to have evidence of hepatitis infection within the first five months of admission to the institution As indicated in figure 5, hepatitis infec-

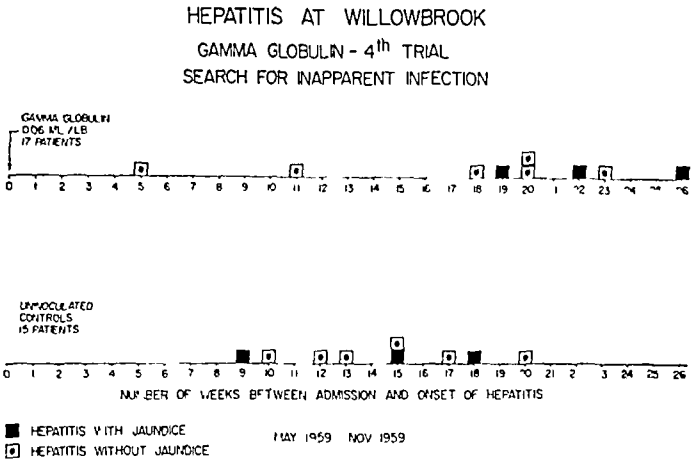

Fig 5—Occurrence of cases of hepatitis with and without jaundice during fourth trial of gamma globulin

tion occurred *in spite of an adequate dose of gamma globulin* This evidence of hepatitis infection in patients passively protected with gamma globulin provides strong support for the hypothesis of passive-active immunization

In the third trial (figure 4 and table 2) gamma globulin appeared to suppress clinical jaundice for the first five months following inoculation As indicated in figure 5 a similar suppressive effect was observed in the fourth trial The three cases of hepatitis with jaundice in the gamma globulin group occurred between 4¾ and 6½ months after inoculation The three cases of overt jaundice in the control group were detected between 2 and 4½ months after admission to the institution

Incidence of Inapparent Infection—An estimate of the incidence of inapparent infectious hepatitis may be obtained by a study of the 15 patients who did not receive gamma globulin Utilizing the criteria adopted for the fourth trial of gamma globulin, nine cases of hepatitis were detected—three with jaundice (clinically apparent) and six without jaundice (clinically inapparent) Therefore, the ratio of apparent to inapparent infection for this small group was 1 2 Had the criteria adopted for the third trial of gamma globulin been utilized, no cases would have been detected It is obvious that the true incidence of inapparent infection will require a large scale study employing the more exact methods used in the fourth trial

Of the nine patients with hepatitis in the control group, eight were between 2 and 6 years of age and one was 13 years old The high proportion of mild

Table 4—*Fourth Trial of Gamma Globulin Search for Inapparent Infection*

No	Name	Age Yr	Thymol Turbidity Units Initial	Thymol Turbidity Units Peak	SGO T, Units Initial	SGO T, Units Peak	Type of Hepatitis	Week After Admission
			Gamma Globulin Group					
1	Cam	3½	2	8	18	126	□	9
2	Vil	11	2	24	18	970	□	11
3	Kar	6	2	22	18	140	□	14
4	Slo	1½	3	27	26	520	■	19
5	Bro	17	7	13	16	180	□	20
6	Bor	5	2	9	18	200	□	20
7	Nol	9	2	17	18	1 200	■	22
8	Camp	5	2	10	18	93	□	23
9	Tro	2	2	18	20	850	■	26
			Control Group					
1	Bar	5	4	21	18	1,080	■	9
2	Phi	13	3	18	31	550	□	10
3	Pap	5	3	27	23	600	□	12
4	Kna	2	2	11	26	90	□	13
5	Cac	3	4	13	18	88	□	15
6	Fal	6	5	24	20	980	■	15
7	Fra	3	3	25	18	560	□	16
8	Top	3½	6	30	18	1,020	■	18
9	Wen	2	3	17	18	1 020	□	20

■ Hepatitis with jaundice □ Hepatitis without jaundice

and inapparent cases is undoubtedly a reflection of the tendency of infectious hepatitis to be especially mild in this particular age group

The similar incidence of hepatitis infection in both the control and inoculated groups of the fourth trial should not be construed to indicate that gamma globulin was ineffective It should be noted that the 32 patients studied in the fourth trial represent a very small sampling of the 1,271 patients observed in the third trial It is likely that the difference between the two groups would have become apparent if a larger number of patients had been studied intensively

Second Attacks of Infectious Hepatitis

Since 1953 approximately 525 cases of hepatitis with jaundice have been observed at the Willowbrook State School Second attacks of overt hepatitis have been observed in about four per cent of this group (21 patients) The intervals between the first and second attacks ranged between 1½ and 21 months

An additional 85 patients were studied intensively from the time of exposure to the time of onset of hepatitis Of this group, 50 patients contracted hepatitis with jaundice and 35 patients had

anicteric hepatitis Second attacks were observed in about eight per cent of this group (seven patients) following intervals ranging between three and nine months

Comment—The occurrence of second attacks of hepatitis must be considered in any evaluation of the effect of gamma globulin One can only speculate about the reasons for this phenomenon At least four possibilities may be suggested

1 The presence of multiple immunologically distinct types of IH virus is a very attractive hypothesis The situation would be analogous to poliovirus Proof for this theory will have to await adaptation of the virus to tissue culture or to an experimental host more practicable than man

2 The virus may become latent in the liver cells or other sites after a primary infection Subsequently, unknown excitants or host factors may disturb the host-parasite relationship, thereby precipitating a recurrent infection This mechanism has been incriminated as the cause of recurrent herpes simplex virus infections

3 The primary acute infection may regress to an active, low grade smoldering state without overt signs of disease Precipitating factors such as excessive activity, excessive alcohol intake or an intercurrent infection may cause an exacerbation of the previous infection

4 The second attack may have been induced by an enormous dose of virus, thereby overwhelming the immune status of the individual This hypothesis was suggested to explain the severe water-borne epidemic of infectious hepatitis in Delhi, India, in December, 1955 During this explosive epidemic approximately 29,300 cases of hepatitis occurred within a seven-week period in a relatively immune population of about 1 5 million persons [10, 11]

Discussion

The studies described in this report have provided data which may have an important bearing on the optimum dose of gamma globulin, on the hypothesis of passive-active immunity and on the incidence of clinically inapparent infectious hepatitis

Dose of Gamma Globulin—It appeared that under the conditions which existed at Willowbrook a dose of 0 06 ml per pound of body weight was superior to the 0 01 ml dose When the larger dose was employed in the second and third trials, a ten and thirtyfold decrease in incidence of overt hepatitis with jaundice was observed With the smaller dose a two and one-half-fold reduction occurred Furthermore, 0 01 ml of gamma globulin per pound of body weight did not protect the attendant personnel in the institution

A review of the various controlled studies [1-6] revealed no evidence that gamma globulin in a dose of 0 01 ml per pound of body weight would protect adults against infectious hepatitis with jaundice The first report by Stokes and Neefe [1] described a study in children who received 0 15 ml of gamma globulin per pound Havens and Paul [2] also studied an outbreak in children, employing a dose of 0 08 ml per pound In the first study in adults reported by Gellis and associates [3] the dose administered was 0 06 ml to 0 12 ml per pound of body weight In the three institutional epidemics described by Stokes and co-workers [4] the following dosages were tried (1) 0 06 ml per pound for children and adults in the first institution, (2) 0 06 ml per pound for adults in the second institution, and (3) 0 01 ml per pound for children between 4 and 14 years of age in the third institution In their family studies Brooks, Hsia, and Gellis [5] reported favorable results with a dose of 0 1 ml per pound Subsequently Hsia, Lonsway, and Gellis [6] reported equally favorable results with 0 01 ml per pound An analysis of the data in the latter study revealed that the protective effect of gamma globulin may have been limited to the children of the families Although no cases of hepatitis occurred among 38 inoculated adults, there were only 2 cases among 55 control adults The results in children were more striking, 11 of 40 control children and one of 57 inoculated children acquired hepatitis with jaundice

In view of the above findings it is our current opinion that the optimum dose of gamma globulin is 0 06 ml per pound of body weight As indicated in the fourth trial even this dosage may not prevent anicteric hepatitis

Passive-Active Immunity—The results of the third and fourth trials of gamma globulin have provided data which support the hypothesis of passive active immunization The two factors which provided support for this theory were (1) demonstration of prolonged protection against hepatitis with jaundice in the third trial, and (2) demonstration of the occurrence of inapparent infectious hepatitis in spite of gamma globulin the fourth trial

The observation of inapparent infection in spite of gamma globulin has been observed with another virus infection, namely, poliomyelitis Hammon and associates [12] have demonstrated that gamma globulin did not protect against poliomyelitis *infection*, its effect was to prevent the paralytic manifestations of the disease

Second Attacks of Hepatitis—Under the conditions which existed at Willowbrook, second attacks were detected in about four to eight per cent of the cases of hepatitis The various possibilities to explain this occurrence have been referred to previously At present, one can only speculate about the true cause Efforts to study this phenomenon have been retarded by the lack of a specific serologic test for infectious hepatitis Many of the problems associated with this disease will be solved when the

causative agent is successfully adapted to a susceptible tissue culture or a suitable animal host

Incidence of Inapparent Infectious Hepatitis—Under the conditions existing at Willowbrook, the attack rate for clinically inapparent hepatitis for the first six months following admission to the institution was about 60 per cent This estimate is derived from the observations in the control group of the fourth trial of gamma globulin, 9 of 15 patients acquired hepatitis Although three of the nine cases were recorded as hepatitis with jaundice, the icterus was so minimal and so transient that it was not observed by the nurses and attendant personnel

The attack rate of overt hepatitis for a comparable six-month period was about five per cent This estimate is derived from observations in the control group of the third trial in which 33 of 636 patients acquired hepatitis within the first six months of admission to the institution Therefore, comparison of these findings with the results of the fourth trial indicates that the ratio of inapparent to clinically apparent infectious hepatitis in Willowbrook was about 12 1

Summary

The efficacy of gamma globulin in the prevention of infectious hepatitis was studied during four controlled trials in an institution where the disease was highly endemic

During the first trial a dose of 0 01 ml per pound of body weight was administered In an inoculated group of patients, predominantly children, the attack rate of infectious hepatitis with jaundice was two and one-half times less than the control group The same dose did not protect an adult group of hospital employees

In the second trial the dose of gamma globulin was increased to 0 06 ml per pound of body weight A tenfold reduction in incidence of overt hepatitis followed this larger dose

During a third trial gamma globulin was administered to alternate patients on admission to the institution Following a dose of 0 06 ml per pound of body weight a thirtyfold decrease in incidence of hepatitis with jaundice was observed for a five-month period following inoculation

In a fourth trial a small group of newly admitted patients were studied intensively for subclinical infection after receiving gamma globulin, 0 06 ml per pound of body weight Clinically inapparent infectious hepatitis occurred in spite of gamma globulin Under these conditions passive-active immunity may have been induced

Under the conditions which existed at Willowbrook, the ratio of anicteric hepatitis to overt disease with jaundice was 12 1

Second attacks of hepatitis with jaundice were observed in about four to eight per cent of patients who had previous episodes, 1½ to 31 months previously

On the basis of studies herein reported, it is suggested that the optimum dose of gamma globulin for children and especially adults is 0 06 ml per pound of body weight

550 First Ave (16) (Dr Krugman)

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The gamma globulin used in the first trial of the immunization program was prepared by Courtland Laboratories, Los Angeles, from lot number 5009 The gamma globulin used in the second, third, and fourth trials was prepared by E R Squibb & Sons, New York, from plasma furnished by the American Red Cross, lot numbers 235-2 and 310

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Treatment of Rheumatoid Arthritis with Dexamethasone

Two Hundred Fifty-one Patients Treated for Short and Long Periods

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WHILE the last word has not yet been written in the development of steroids for the treatment of rheumatoid arthritis, it is pertinent to report on studies to date The original reports on dexamethasone, like those on cortisone, hydrocortisone, prednisone, prednisolone, methylprednisolone, and triamcinolone, made it appear promising indeed The promise did not exclude certain untoward reactions, however With the advent of each new steroid, it has been hoped that there would be fewer such side-effects Unfortunately, the ideal steroid has not yet been discovered

The therapeutic advantage of steroids lies in their anti-inflammatory and antirheumatic activity Theoretically, the greater the anti-inflammatory activity, the lesser the side-effects, since a better anti-inflammatory agent would require a smaller dose of steroid to produce antirheumatic activity

The use of steroids poses a few questions 1 What are the side-effects? 2 How serious are these side-effects? 3 What is the ultimate outcome of the long-term use of steroids? 4 Which is the lesser of the evils, invalidism from rheumatoid arthritis or the side-effects of steroids? There is a marked difference between patients seen in a large clinic in a general hospital and those seen in private practice The clinic patient often waits until irreversible changes have occurred in the joints before seeking aid, while the private patient will seek help almost at the onset of the disease In the statistics to be published by Meltzer and one of us (A C),[1] there is evidence to show that except for osteoporosis in a small percentage of cases there is little to fear from the prolonged use of steroids

Chief of Arthritis Clinic (Dr Cohen) Resident in Medicine (Dr Kanenson) and assistant physicians Arthritis Clinic (Drs Goldman Turner and Rose) Philadelphia General Hospital Dr Cohen is now Medical Director Philadelphia Plan City of Hope

Statistics were gathered on 251 cases of rheumatoid arthritis treated for long and short periods with dexamethasone In a private clinic there were 187 patients from mines and steel mills In an arthritis clinic of a general hospital, there was a second group of 64 patients, sedentary workers, who were mostly recipients of public assistance Of interest was the minimum maintenance dose, the untoward reactions, and the effect of dexamethasone on weight The drug was more effective for the resting patients, it was possible to reduce the maintenance dose much faster and the final level of maintenance dosage was lower Untoward reactions included depression of pituitary-adrenal axis osteoporosis, and increase in weight Except for the osteoporosis seen in a small percentage of cases, there seemed to be little to fear from the prolonged use of steroids

Materials and Methods

We are reporting on two groups of cases treated with dexamethasone, one in a group of 187 patients, workers from the mines and steel mills of western Pennsylvania, and another in a group of 64 patients from the arthritis clinic of the Philadelphia General Hospital Heavy labor is the occupation of the former group, and this fact must be taken into consideration when one evaluates the statistics Their diet is usually fairly high in protein and carbohydrate

Patients in a large city hospital, on the other hand, are of the indigent group whose economic circumstances determine that carbohydrates be a major portion of their diets Since most are recipients of public assistance, their work is more or less sedentary

TABLE 1 —*Maintenance Dose of Dexamethasone in Johnstown Group*

Dose, Mg	Group* MI	Group* I	Total
0 375			
0 75			
1 0	2	1	3
1 125			
1 5	6	1	7
1 875			
2 0	1	2	3
2 25	24	52	76
2 5		1	1
3 0	5	9	14
3 75			
4 0	4	8	12
4 5	2	7	9
6 0	3	6	9
Total	47	87	134

*Patients in categories NI and W not included in this tabulation

Statistics were gathered in two separate clinics One of us (J G) directs a large private arthritis clinic for steel workers and miners in Johnstown, Pa Statistics were collected on a group of 187 patients treated with dexamethasone for periods of from a few weeks to over one year Similar studies were done in the arthritis clinic at the Philadelphia General Hospital

Method of Study —In the Philadelphia General Hospital the following symbols are used MI, meaning much improved, indicates that the patient has become symptom free, that is, free from both pain and stiffness, and that the joints may be less swollen, but deformities remain, I, meaning improved, indicates that there is subjective and objective evidence of diminished pain and stiffness, although some pain and stiffness remain, NI, meaning no improvement, indicates that the status of pain, stiffness, and deformity is as it was prior to therapy, and W, meaning worse, indicates not only that there is no alleviation of symptoms but that pain and stiffness are actually aggravated

These symbols were also used for patients in the Johnstown group, but these patients were still at their jobs when they were able to be The fact that pain and stiffness were present did not prevent a patient in this group from continuing to work Because of this, a difference exists in the evaluation of improvement In reality, most cases under the heading "I" belong in the category "MI" If these patients had been in the economic situation of the Philadelphia General Hospital patients, most of whom were on the unemployment rolls, they too would have come within the framework of "MI" Thus, the percentage of comparable results for the Johnstown group would have been MI, 25 66, and I, 45 99, for a total of 71-65, which compares almost exactly with the 75 graded MI in the hospital group

Patient Disease Data —Of the total 251 patients in both institutions the duration of the disease was up to one year in 51 cases, from one to five years in 98 cases, and five years or over in 102 cases The objective was to determine the minimum maintenance dose necessary, the untoward reactions, and the effect of this steroid on weight Almost all the patients were managed on an ambulant basis

All patients met the criteria for the diagnosis of rheumatoid arthritis There was pain, swelling, and stiffness in small as well as large joints There was limitation of motion, and stiffness was most pronounced in the early morning hours before arising Laboratory studies included determinations of sedimentation rate and blood uric acid level, blood count, and latex tests

Dosage Schedules —In order to obtain a proper result when systemic therapy with steroids is given, one must always give a large enough dose to bring about cessation of activity of the disease process An excessive dose need not be feared so long as the objective is to give an optimum dose eventually, and one cannot arrive at an optimum dose without first administering an excess The dose must then be gradually diminished over weekly intervals until the optimum level is reached We continue at this level for a number of weeks, and the dosage is then diminished further by successive decrements of 0 375 mg of dexamethasone for several periods of a few more weeks (tables 1 and 2) By this method we have been able to reduce the maintenance dose as low as 0 375 mg in a few cases and

TABLE 2 —*Maintenance Dose of Dexamethasone in Philadelphia Hospital Group*

Dose, Mg	Group MI	Group I
0 375	6	
0 75	10	
1 125	2	
1 5	11	4
1 875	4	
2 0	1	1
2 25	3	2
3 0	3	2
3 75	3	
4 5	2	
Total	49	9

0 75 mg in others In a few instances, we have been able to discontinue medication altogether and the improvement has been maintained

The figures in table 2 are at variance with those of the Johnstown group In most cases (43 12%) the maintenance dose of dexamethasone was considerably under 2 25 mg daily This too must be a fa

tor in the relationship between clinic cases in a general hospital and those of hard-working miners and steel workers

Results

Of the total 187 patients at Johnstown 50 46% were given a maintenance dose of 2 25 mg of dexamethasone daily However, note must be taken of the fact that the longer the patient received the the drug, the smaller the maintenance dose, so that in patients treated for eight months or over the maintenance dose was reduced to from 0 375 to 1 5 mg (table 3)

In the Philadelphia General Hospital group of 64 patients, there were only 7 on a maintenance dose of 2 25 mg, or less than 11% A smaller dose level was reached much faster than in the Johnstown group However, the final level of maintenance dosage in the Johnstown group, 0 375 to 1 5 mg, was also reached at eight months in the hospital group (table 4) It should also be noted that some patients require as little as 0 375 mg and on occasion a small percentage required as much as 6 mg daily for long periods The dosage schedule must be tempered with common sense

In the hospital group the dose of dexamethasone was reduced gradually, as described The 20 patients under "MI" who were treated for eight months or more were on a dosage schedule of from 0 375 to 1 875 mg This represents ½ to 2½ tablets of 0 75 mg each This dosage schedule is satisfactory, and attempts are being made to further decrease the dose

It is evident that, in those cases in which a satisfactory recovery has been made, the maintenance dose can be so small as to obviate untoward reactions, and, as has been stated, sometimes the drug may be discontinued and improvement maintained There are 39 cases in the category "NI" and 14 cases in "W" in the Johnstown group It is not

TABLE 3 —*Over-all Improvement in Johnstown Group*

Mo	MI	I	NI	W	Total
Up to 1	2	23	12	8	45
1 2	5	11	11	1	28
2 3	8	8	9	3	28
3-4	5	13	5		23
4 5	5	6		1	12
5-6	1	5	1	1	8
6-8	13	11	1		25
8 9	5	5			10
9 or over	3	5			8
Total	47	87	39	14	187
%	25 66%	45 99%	20 85%	7 48%	

reasonable to assume that dexamethasone would aggravate rheumatoid arthritis, therefore, we are grouping the "NI" with the "W" cases, making a total of 53 cases or 28 3% Likewise, in the Philadelphia General Hospital group, there were four and two, respectively, in these categories, totaling six cases or 9 375%

Weight Gain —We considered weight gain to be a side-effect only in those patients in whom it could be classified as excessive An arbitrary figure of 10 lb (4 5 kg) or more was assumed Up to one month of therapy produced little or no weight gain However, in nine months in the Philadelphia General Hospital group, there was excessive weight gain in 34 9% of cases One patient gained 43 and

TABLE 4 —*Over-all Improvement in Philadelphia General Hospital Group*

Mo	MI	I	NI	W	Total
Up to 1	4	4	4		12
1 2	7	1			8
2-3	2				2
3-4	2	2			4
4 5	2				2
5-6	6	2			8
6-8	6			2	8
8-9 and over	20				20
Total	49	9	4	2	64
%	76 562	14 062	6 25	3 125	

another 47 lb (20 and 21 kg respectively) Over a similar period in the Johnstown group, only 13 9% of patients had a significant gain in weight This may be a reflection of the variance in the physical activity of the two groups

The question of weight gain may or may not be a serious one The increase in appetite is sometimes so great that the patient is constantly hungry The sodium in the blood is at normal levels Fluid is not retained but fat accumulates, sometimes in large quantities We believe that this weight gain is in excess of what should be expected from other steroids There appeared to be no relationship between the dose of dexamethasone and the gain in weight

In the debilitated patient this may be a great advantage, but in the person of normal weight it may be detrimental We are at the moment investigating methods to cope with this matter, and we hope to report soon that ways and means are available to stop this untoward reaction

Comment

As can be seen from the tables, the percentage of "MI" patients at Philadelphia General Hospital was 76 56 while that at Johnstown was only 25 66 This discrepancy is based on the fact that patients at Johnstown continued their occupation while the Philadelphia General Hospital patients rested With dexamethasone treatment, a resting patient can achieve complete cessation of activity of the disease process while the active patient may have considerable relief from pain and yet not enough to be called complete It is estimated that most of the patients marked "I" in the Johnstown group would have been marked "MI" had they been treated under the same circumstances as the Philadelphia General Hospital group

When cortisone and ACTH were first in general use, the common untoward reactions to them included Cushing's syndrome, hypertension, sodium retention with potassium excretion, loss of calcium and phosphorus, glycosuria and hyperglycemia, protein catabolism, inhibition of fibroblastosis, inhibition of hyaluronidase activity, duodenal ulcer, reactivation of pulmonary tuberculosis, depression of the adrenal-pituitary axis, moon face, "buffalo hump," and osteoporosis

The advent of prednisone and prednisolone presented considerable advantages It was immediately evident that it was no longer necessary to be concerned with sodium retention or potassium excretion, except in exceptional cases in which very large doses were given

With the judicious administration of prednisone or prednisolone, hypertension, protein catabolism, and psychoses became less important Duodenal ulcer [2] and reactivation of pulmonary tuberculosis [3] have been shown to have been exaggerated in importance The retardation of wound healing,[4] while still a factor, is not a universal effect In patients who are affected, healing is slowed down but not completely retarded With ordinary doses, however, there is no slowing down of the healing process Fibroblastosis is retarded only in patients receiving high doses In the potential diabetic, glycosuria and hyperglycemia occur, however, with gradual reduction in dosage or cessation of use of the steroid this situation returns to its pretreatment state A few untoward reactions still remain to be counteracted Moon face and "buffalo hump' occur in most cases, although these signs appear to be of little significance except for their cosmetic effect

Adrenal Cortical Depression—The work of Guignard and Ducommun [5] contains the following statements about the administration of cortisone, prednisone, or prednisolone "Degranulation of the basophil cells constitutes the chief pituitary modification even small doses of cortisone may modify the structure of the pituitary produces secondary adrenal hypofunction Morphological observations reveal progressive atrophy of the adrenal cortex with rarefaction of the lipid content of the fascicular zone" The authors, however, state that all of these are reversible The problem at present is to determine at what dose of steroid this can be reversed or whether the drug must be stopped altogether at the expense of reactivation of the original disease process If the Thorn test is any criterion, our own results [6] indicate that complete depression of the adrenal cortex is not as common as it was once thought to be

Osteoporosis—Next in importance to adrenal cortical depression as a side-effect of long-term steroid therapy is osteoporosis That postmenopausal osteoporosis produces compression fractures in the vertebral bodies is well documented However, osteoporosis due to steroid administration differs in at least one respect, it may be more widespread and fractures may occur in other bones than the spine In a group of 81 patients treated with steroids [1] for periods varying from five to nine years, we encountered 18 (22 22%) with compression fractures, 11 of these (13 58%) were in postmenopausal women, 2 (1 47%) were in menstruating women, and 5 (6 17%) were in men How many of the cases in postmenopausal women were truly steroidal osteoporosis it is impossible to determine A recent report [7] documented the possibility of aid in the treatment of osteoporosis, which is confirmed by our own experience

Conclusions

Dexamethasone is another steroid giving satisfactory results in the treatment of rheumatoid arthritis There is a major difference between those patients who continue their occupation during treatment and those who do not Untoward reactions may be minimized by adherence to a proper dosage schedule The untoward reactions still to be reckoned with are osteoporosis and depression of the pituitary-adrenal axis However, with dexamethasone an increase in weight appears to be an added factor Evidence exists that all other untoward reactions to steroid treatment are becoming less serious

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The dexamethasone used in this study, supplied as Deronil, and an estrogen-androgen preparation, Gynetone, were furnished by Schering Corporation, Bloomfield, N J, through the courtesy of George Babcock, M D Strontium lactate was supplied as Strontolac by Wyeth Laboratories, Philadelphia

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Chemically Modified Adrenocortical Steroids

An Appraisal of Their Relative Therapeutic Efficiencies in Rheumatoid Arthritis

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DURING the past seven years, chemists, physiologists, and clinicians have expended great energy in developing and testing synthetic derivatives of the basic adrenocortical steroids, hydrocortisone and cortisone Research has been channeled in this direction in the hope that an understanding of the influences exerted by structural changes on the biologic functions of steroids would lead to the creation of superior treatment agents The need for drugs possessing higher therapeutic indices than those of the naturally occurring hormones became obvious soon after their clinical introduction, when their limitations in the management of rheumatoid arthritis and other chronic diseases responsive to steroids were realized With their systemic administration for long periods (three years or more), investigators found that impedient features prevented satisfactory control of more than one-half of rheumatoid patients

It would be expected that certain limiting inherent deficiencies of hydrocortisone and cortisone, as treatment agents for rheumatic arthritis, would be shared by their chemically modified analogues These limitations include their suppressive rather than a curative action, for the hormones merely restrain, in a nonspecific fashion, inflammatory or hypersensitivity responses of the pathologic process, their temporary influence which demands uninterrupted administration if improvement is to be continued, their failure to halt disease progression even while adequate improvement and functional rehabilitation are being maintained, and their inhibition of endogenous adrenocortical function after prolonged or intensive administration

Other limitations of the naturally occurring hormones that interfere with their practical application, even as suppressive agents, stem from the fact that, in addition to an anti-inflammatory effect, they exert multiple physiologic actions When they are administered in amounts sufficient to produce a desired antirheumatic influence, signs of hormonal excess frequently intervene The intrusion of such unwanted side-effects" as excessive appetite, weight gain, hypertrichosis, acne, striae, osteoporosis, blood pressure elevation, nervous irritability, retardation of fibrosis and delayed healing, increased capillary fragility, thinning of the skin, or masking of infection, interferes with the use of effective dosages and the maintenance of satisfactory improvement Moreover, the accessory' biologic properties may, during the course of treatment, lead to the development of complications (peptic ulcer [and its complications], compression

> The desired antirheumatic effects can be obtained equally well from prednisone, prednisolone methylprednisolone triamcinolone, dexamethasone, and fluprednisolone provided they are given in effective dosages With each drug, however, it is necessary to consider the ratio of the effective dosage to the dosage that will cause its own characteristic undesirable side effects This ratio (therapeutic index) is about the same for prednisone, prednisolone, and methylprednisolone, all of which are superior in this respect to cortisone and hydrocortisone and are preferred for routine use in rheumatoid patients requiring steroid administration Triamcinolone and dexamethasone are considered special purpose steroids, and fluprednisolone, on the basis of preliminary data, is believed to be a satisfactory antirheumatic agent free from salt-retention effects

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fractures, phlebitis, emotional or psychotic disturbances, necrotizing vasculitis, and others) They may set up relative or absolute contraindications for use of the hormones by aggravating certain disease states (arterial hypertension, peptic ulcer, diabetes, osteoporosis, or tuberculosis) coexisting with rheumatoid arthritis Suppressive drugs with improved therapeutic indices could be produced, were it possible to modify the chemical structures of the basic steroids in such a way as to eliminate or attenuate those biologic functions which promote objectional "side-effects" and complications, yet retain potent anti-inflammatory action

Hope that artificial steroids with dissociated physiologic functions might be prepared was first suggested in 1953 by the discovery that the addition of halogen atoms at the ninth carbon position of the steroid's nucleus caused a striking alteration of hydrocortisone's anti-inflammatory activity and other biologic functions [1] Nine α-fluorohydrocortisone (fludrocortisone), for example, was found to be 10 times more potent in antirheumatic activity than hydrocortisone By a similar factor, it was more powerful in eosinopenic, ACTH suppressing, and nitrogen-wasting effects But the compound's properties of sodium retention and potassium loss were augmented to an extent so much greater that it could not be used systemically as an anti-inflammatory drug Nonetheless, observations with 9 α-halogenated compounds made it evident that the anti-inflammatory potency of the natural steroids could be increased and that certain other metabolic actions could be changed by modifying their chemical structures Subsequently, the formulae of hydrocortisone and cortisone have been altered in a number of ways, and hundreds of complex synthetic compounds have been produced Some of these have displayed variances in anti-inflammatory potency and/or have exhibited quantitative differences in one or several biologic functions

Several synthetically modified analogues have been introduced commercially for the treatment of rheumatoid arthritis and other conditions responsive to steroids Some possess advantages in one respect or another, but none is divested of the major deterrent features of corticosteroid therapy, and some produce peculiar objectionable reactions of their own Because of a lack of published comparative data and misleading promotional pharmaceutical advertising, physicians have been confused regarding the relative merits, special properties, and tendencies to unwanted reactions of these newer preparations Based principally on my experience among patients with rheumatoid arthritis, an attempt will be made herein to summarize, in general terms, the relative therapeutic merits of six synthetic analogues—prednisone, prednisolone, methylprednisolone, triamcinolone, dexamethasone, and fluprednisolone (see the figure)

Prednisone and Prednisolone (Delta[1]-Cortisone and Delta[1]-Hydrocortisone)

The first chemical innovation leading to the creation of modified analogues that could be prescribed systemically for rheumatoid arthritis consisted of the introduction of a double bond between the first and second carbon atoms of cortisone and hydrocortisone The resulting compounds, prednisone and prednisolone, were found to possess adrenocortical activity (as measured by eosinopenic response, liver glycogen deposition, and thymus involution in adrenalectomized mice) which was three to four times greater than that exhibited by their precursors [2] The antiphlogistic strengths of prednisone and prednisolone in human subjects were similarly augmented, but their electrolyte activities were not proportionately increased

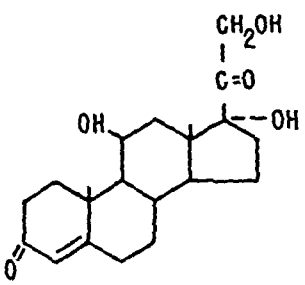
Some pertinent clinical observations made with prednisone and prednisolone may be summarized as follows [3-5]

1 The milligram antirheumatic potencies of the analogues are, on an average, approximately four times greater than those of hydrocortisone (range in individual cases 2 4 1 to 5 3 1) Accordingly, the dosages required are smaller than for hydrocortisone, in our practice the usual range has been about 10 0 to 15 0 mg a day for severe cases, 7 5 to 12 5 mg for moderately severe cases, and 5 to 7 5 mg for moderate cases For practical purposes, prednisone and prednisolone are equally potent and may be used interchangeably

2 When dosages of equivalent antirheumatic potency are given to patients not previously treated with steroids, prednisone and prednisolone promote the same pattern of initial improvement as does hydrocortisone Statistical results of the improvement status during the first few months of therapy have been similar with prednisone, prednisolone, and hydrocortisone, the results of longer term therapy have been significantly better with the modified compounds

3 Satisfactory rheumatic control, lost after prolonged hydrocortisone or cortisone therapy, may be regained in an appreciable number of patients by changing medication to prednisone or prednisolone Among 70 of our patients whose conditions deteriorated below adequate levels during hydrocortisone administration, nearly one-half recovered their previous improvement after transfer to the derivatives in dosages slightly larger in terms of antirheumatic strength [6] With the further prolongation of steroid therapy, the improvement again waned in certain patients, but in others such management remained successful for periods longer than two years In some instances the improved state was attributable to the more effective doses permitted by correction of salt and water retention, in other instances there was no adequate explanation

4 When the drugs are administered in doses of similar antirheumatic strength, the general incidence of adverse reactions from perdnisone and prednisolone is about the same as from hydrocortisone The compounds differ, however, in tendency to induce certain individual side-effects The incidence and degree of salt and water retention and blood pressure elevation are much less with prednisone and prednisolone Conversely, the analogues are more likely to promote digestive complaints, peptic ulcer, vasomotor symptoms, and cutaneous ecchymoses Other unwanted effects, such as facial mooning, fat pads, nervous symptoms, hypertrichosis, acne, skin tabs, disturbances of glucose tolerance, and probably osteoporosis, appear with similar frequency when comparable antirheumatic doses are prescribed The occurrence rate for digestive complaints and for roentgenographically demonstrable peptic ulcers may be substantially reduced, probably to a level as low as during hydrocortisone therapy, by the simultaneous administration of nonabsorbable antacids with each divided dose of the drugs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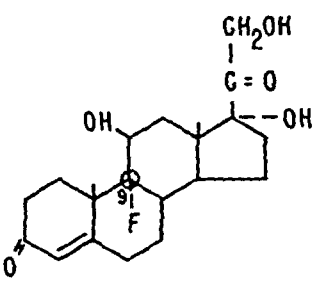
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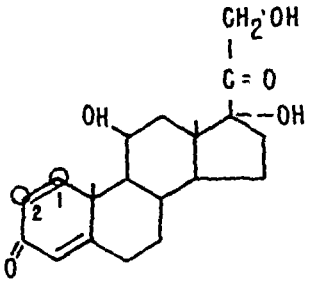
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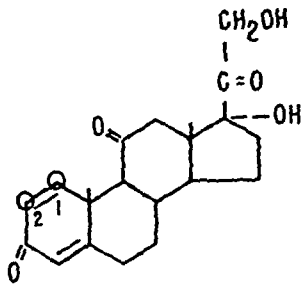
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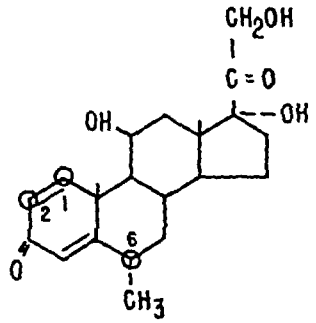
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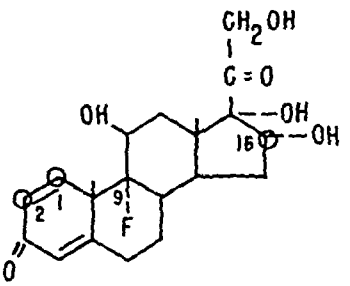
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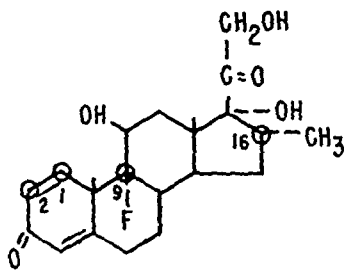
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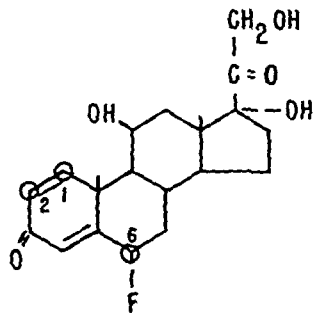
FLUPREDNISOLONE
(6α-fluoroprednisolone)

Chemically modified adrenocortical steroids of therapeutic interest

Most clinical investigators prefer prednisone or prednisolone to hydrocortisone or cortisone for rheumatoid patients who require steroid therapy

This preference is prompted by the analogues' reduced tendency for salt and water retention and potassium loss, by their ability to restore improvement in a significant percentage of patients whose control has been lost during hydrocortisone or cortisone therapy, and by improved statistical results on long-term administration Thus, it would appear that the therapeutic indices of these two analogues, especially when employed in conjunction with nonabsorbable antacids, are higher than for hydrocortisone and cortisone

Methylprednisolone (6 Alpha-Methylprednisolone)

During the past four years, methylprednisolone has been used extensively in the management of rheumatoid arthritis The compound differs chemically from prednisolone only by the addition of a methyl radical at the 6 α-carbon position Biologic experiments in animals suggested that the analogue might prove to have additional therapeutic assets it did not cause sodium retention at any test level of dosage, and, compared with hydrocortisone, its glycogen deposition activity was 10 times greater and its granuloma inhibiting strength was 6 times greater[7] In human subjects, however, the metabolic effects of methylprednisolone did not differ appreciably from prednisolone itself its activities, with respect to nitrogen excretion, ACTH suppression, and the reduction of circulating eosinophils were much the same as for prednisolone, its tendency to retain sodium and lose potassium was slightly less than for the parent compound[8]

Clinical observations resulting from the administration of methylprednisolone in patients with rheumatoid arthritis have led to the following deductions

1 Direct comparisons of methylprednisolone and prednisolone dosages required to uphold similar degrees of clinical improvement suggest that the two compounds possess little difference in antirheumatic strength, on an average, methylprednisolone is estimated as 15 to 20 per cent more potent per milligram

2 The character and degree of improvement in rheumatic manifestations resulting from methylprednisolone administration as initial therapy do not differ from those anticipated from prednisolone given in similar or slightly larger milligram doses Among patients being maintained on either drug, transfer of medication to the other does not interfere significantly with the state of improvement

3 The type, incidence, and degree of adverse reactions noted from methylprednisolone are essentially the same as from prednisolone, although its proclivity for salt retention may be even lower

From the standpoint of practical therapeutic application, methylprednisolone has proved to be a satisfactory antirheumatic agent, but when compared with prednisolone it has not clearly exhibited either advantages or disadvantages Since the two steroids promote similar responses in previously untreated patients, uphold clinical improvement equally well on long-term administration, and provoke adverse effects which, for the most part, are similar in kind, degree, and frequency, their therapeutic indices seem to be about equal No published data, however, allow true comparisons of the incidence of peptic ulcers and osteoporosis from the two compounds

Triamcinolone (16 Alpha-Hydroxy, 9 Alpha-Fluoroprednisolone)

Triamcinolone is a complex steroid which differs chemically from prednisolone by the addition of a hydroxyl radical at the 16-alpha carbon position and a fluorine atom at the 9-alpha position The presence of a hydroxyl group at C-16 practically eliminates the severe sodium retention effects of 9-alpha fluorination and allows compounds containing this substituent to be used systemically Biologic assays in animals revealed the following[9] The glycogen deposition activity of triamcinolone was 13 times that of hydrocortisone, its anti-inflammatory strength, as measured by granuloma formation, was 4 times that of hydrocortisone, or about equal to prednisolone, sodium retention was not provoked by the drug, but rather marked diuresis and sodium removal were obtained in adrenalectomized rats loaded with salt, and were even obtained in normal rats and dogs Balance studies in human subjects indicated that the agent produced slight losses of nitrogen, calcium, and phosphorus with dosages in therapeutic range, and that sodium excretion often occurred during the first few days of administration[10]

Clinical experiences relevant to an evaluation of the therapeutic efficiency of triamcinolone may be summarized as follows

1 Comparative dosage studies established that, on a weight for weight basis, the antirheumatic potency of triamcinolone is somewhat greater (15 to 20 per cent) than prednisolone and about equal to methylprednisolone

2 The improvement resulting from the initial administration of triamcinolone is similar to that noted with other steroid compounds possessing powerful antirheumatic activity In my experience, the percentage of patients maintained satisfactorily for long periods has been distinctly smaller than with prednisolone and methylprednisolone Inferior results have been due principally to the intrusion of undesirable reactions peculiar to the drug, which have made necessary, or prudent, transfer of medication to another steroid Continuance of triamcinolone therapy was considered inadvisable in 20 per cent of patients who received the drug as initial treatment and in 24 per cent of patients whose medication was transferred from prednisolone

3 When comparable antirheumatic dosages of prednisolone and triamcinolone are employed, the incidence and degree of certain individual unwanted reactions from the drugs differ considerably, since triamcinolone has a tendency to produce some unique effects of its own Triamcinolone has less tendency than any other available steroid for salt and water retention, edema, even slight in degree, rarely has been reported The drug has little or no tendency to aggravate arterial hypertension Furthermore, triamcinolone seldom causes appetite stimulation or weight gain, and, compared with prednisolone, its tendency for abnormal fat deposition (mooning of the face, supraclavicular and cervicodorsal fat pads) is less The two steroids, however, seem to have about the same tendency for objectionable reactions such as hirsutism, acne, striae, ecchymotic skin lesions, vasomotor symptoms, glycosuria, and dyspepsia Although conclusive data are not available, the same is probably true for osteoporosis, peptic ulceration and its complications, phlebitis, and nervous reactions

Among the unique unwanted effects of triamcinolone may be listed anorexia, weight loss (sometimes with notable wasting of subcutaneous and muscle tissue), muscle weakness leg cramps, nausea, cutaneous erythema, dryness and burning sensation, generalized fatigue, dizziness, and general toxic feeling The incidence of some of these reactions has been substantial (anorexia—10 per cent, muscle weakness—16 per cent, pronounced weight loss—18 per cent)

The peculiar side-effects of triamcinolone have occurred with sufficient frequency and prominence to discourage its routine use for rheumatoid patients requiring steroid therapy Rather, the drug may be employed advantageously as a special purpose steroid, as when salt and water retention (from other steroids, in hypertension, or in cardiac decompensation) or excessive appetite and weight gain are problems in management

Dexamethasone (16 Alpha-Methyl, 9 Alpha-Fluoroprednisolone)

Dexamethasone differs from prednisolone by the presence of a methyl grouping at the 16 α-position and of a fluorine atom at the 9 α-position It differs from triamcinolone by having a methyl instead of a hydroxyl radical at the 16 α-carbon position Like 16 α-hydroxylation, 16 α-methylation reduces markedly the salt retaining property of 9 α-fluorinated compounds But this modification, in contradistinction to 16 α-hydroxylation, often enhances and does not reduce anti-inflammatory potency Biologic tests indicate that dexamethasone is the most powerful corticosteroid compound which has been devised [11] Its activity, as determined by thymus involution, is 140 to 200 times greater than that of hydrocortisone, by granuloma inhibition 200 times greater, and by glycogen deposition 20 times greater Sodium retention is not provoked in animals even at high dosage levels The fact that carbohydrate metabolism is influenced to a much less extent than anti-inflammatory activity suggested that the compound might be clinically useful in patients with coexisting diabetes Studies of the hyperglycemic potency of dexamethasone in man, however, have not corresponded with the findings in animals Frawley [12] and West and collaborators [13] determined that the hyperglycemic, as well as the eosinopenic and adrenal suppressive, potency of the analogue was just as great as its reported anti-inflammatory strength

Clinical evaluations with dexamethasone, some of which have been conducted for more than two and one-half years, may be summarized as follows [14 15]

1 The antirheumatic activity of dexamethasone, determined by direct dosage comparisons, is approximately seven times that of prednisolone (potency range 1 5 to 1 10, but 1 6 to 1 8 in the majority of trials), a finding which establishes it as the most powerful antirheumatic glucocorticoid yet synthesized By calculation, it may be considered to be roughly 30 times as potent as hydrocortisone In practical management, 0 75 mg of dexamethasone promotes a therapeutic response equivalent to about 4 mg of triamcinolone or methylprednisolone, 5 mg of prednisolone or 20 mg of hydrocortisone

2 Among patients not previously treated with steroids, dexamethasone, prescribed in remarkably small doses (1 0 to 2 5 mg, average—1 5 mg), promotes an immediate response and subsequent early improvement similar to that induced by much larger milligram doses of other anti-inflammatory steroids In one large series of rheumatoid patients, the average maintenance dose was 1 13 mg a day [14] In a group of 55 patients suffering from severe or moderately severe disease that was poorly controlled on prednisolone, transfer to dexamethasone (in antirheumatic dosages that averaged slightly larger than the calculated equally potent doses) resulted in the recovery and maintenance of adequate levels of improvement for periods of six to nine months in approximately one-third of the patients When treatment was continued for longer periods, the improved status of some patients again deteriorated, but, at the end of two years, one-sixth of the group was still classified as adequately controlled This indicates that not infrequently the improvement lost during prednisolone therapy may be restored and maintained by transferring of medication to dexamethasone

3 The over-all incidence of adverse reactions is not lower with dexamethasone than with prednisolone, either among patients receiving steroid

therapy for the first time or among patients transferred from prednisolone to dexamethasone

4 Some general observations follow regarding individual side-effects in a group of 92 patients observed for one year and treated with dexamethasone in average daily maintenance doses of 1 2 mg (range 0 5 to 2 25 mg)

a With dosages of corresponding antirheumatic strength, the steroid had approximately the same tendency as prednisolone to produce facial mooning, supraclavicular and cervicodorsal fat pads, hypertrichosis, acne, and nervous excitation

b Peripheral edema occurred uncommonly and, even then, was mild Its rate of occurrence was 7 per cent, an incidence less than that for prednisolone and greater than that for triamcinolone The steroid had little or no tendency to produce hypertension or to aggravate pre-existing hypertension

c Among the more common and certainly the most objectionable side-effects encountered with dexamethasone therapy are excessive appetite (21 per cent), excessive weight gain (26 per cent), abdominal girth (20 per cent), and abdominal bloating and distension (16 per cent) The frequency and the severity of these symptoms varied directly with the size of the maintenance dose, and effort was made not to exceed dosages of 1 mg a day for females and 1 5 mg a day for males But even so, in 21 per cent of the patients these symptoms were sufficiently marked to warrant cessation of the drug and change of medication to another steroid Ecchymotic skin lesions (59 per cent) and thinning of the skin (28 per cent) developed more commonly and more intensively than with other steroids these cutaneous manifestations worsened as dosage was elevated and therapy prolonged

d Digestive symptoms suggestive of peptic ulcer occurred uncommonly (2 per cent), but the development of roentgenographically demonstrable ulcers (disclosed on routine gastrointestinal roentgen examinations) (8 6 per cent) was approximately the same as in a similar group of patients who received prednisolone and were subjected to routine x-ray studies (9 per cent)

From observations made during the past two and one-half years, it has become apparent that the striking increased potency has not conferred on dexamethasone a higher general therapeutic index than that of prednisolone Among patients receiving dexamethasone as initial treatment, the over-all results have not been better statistically Furthermore, it was necessary to discontinue the steroid in one-fifth of the patients because of such reactions as excessive appetite stimulation, weight gain, abdominal girth and distension, and ecchymotic skin lesions It would seem preferable to employ dexamethasone, like triamcinolone, as a "special purpose" steroid It may be useful under certain conditions, i e, when the therapeutic response to other steroids is not satisfactory and when it is desirable to promote increased appetite and weight

Newer Analogues Under Clinical Investigation

Chemists have shown no signs of weariness in fabricating new derivatives of hydrocortisone and cortisone Within recent months a multitude of complex steroids have confronted physicians interested in clinical investigation These derivatives contain various combinations of chemical modifications, including some newer innovations, such as methylation at C-21, beta methylation at C-16, dehydrogenation at C-6—C-7, and fluorination at C 6 Some of these analogues differ considerably in antirheumatic potency, and some appear to exhibit partial dissociations of one or another biologic function But, as yet, none has been studied sufficiently long to assess its true therapeutic efficiency

One new compound, fluprednisolone or 6 α-fluoro prednisolone, has received trial in 54 of our rheumatoid patients for periods of 9 to 12 months Fluprednisolone is approximately two and one-half times as powerful (2 6 times, on average) as prednisolone in antirheumatic activity, and, so far, it has proved to be satisfactory in controlling rheumatoid manifestations Average daily maintenance dosages of the substance have ranged from 2 to 7 mg Evidences of salt and water retention have not been noted with these doses The steroid appears to have less tendency than prednisolone for appetite stimulation, weight gain, abnormal deposition of fat, and nervous excitation Whether these preliminary evaluations are verified by long-term observations remains to be seen Since no "new" or "strange" adverse reactions have been noted during its administration, it now appears obvious that 6 α-fluorination does not exert a deleterious influence on prednisolone

Comment

From clinical observations made during the treatment of rheumatoid arthritic patients, an attempt has been made to summarize the relative therapeutic merits, special properties, and tendencies toward unwanted reactions of six chemically modified analogues of hydrocortisone and cortisone The following compounds were considered prednisone, prednisolone, methylprednisolone, triamcinolone, dexamethasone, and fluprednisolone

In general, each of the preparations promotes a similar pattern of improvement when dosages of comparable antirheumatic potency are employed The several compounds display differences in antirheumatic strength and exhibit quantitative differences in one or several "accessory" biologic properties which lead to the production of unwanted reactions Although appreciable variations

in therapeutic benefits from one drug may be noted among individual patients, as compared with those of another, no one preparation exhibits consistent advantages, and none is divested of the major inherent limitations of corticosteroid therapy

On a milligram for milligram basis, the several compounds demonstrated considerable variations in antirheumatic potency Direct dosage comparison studies established that the potencies of prednisone and prednisolone are similar and, on an average, approximately four times greater than that of hydrocortisone Compared with prednisolone, the potencies of methylprednisolone and triamcinolone are slightly greater (about 20 per cent), whereas that of dexamethasone is decidedly greater (about seven times) Fluprednisolone occupies an intermediate position, being about two and one-half times more potent per milligram than prednisolone Antirheumatic potency alone imparts no influence on therapeutic efficiency, this depends on the maintenance of adequate improvement in relation to the development of undesirable effects

Prednisone and prednisolone were considered to have higher therapeutic indices than cortisone and hydrocortisone This evaluation was based chiefly on their reduced tendency for salt and water retention and potassium loss, their capacity to restore improvement in a significant number of patients whose control was lost during treatment with the natural hormones, and on better over all statistical results of long-term administration Because of the apparent increase in ulcerogenic effects, prednisone and prednisolone and, for that matter, all other commercially available steroids should be prescribed in conjunction with nonabsorbable antacids

In the practical management of patients, methylprednisolone did not exhibit clearly defined advantages or disadvantages as compared with prednisolone The two steroids promoted and upheld similar degrees of clinical improvement and provoked adverse effects, alike in kind, degree, and incidence their therapeutic indices were considered to be about equal Prednisone, prednisolone, or methylprednisolone were preferred for routine use in rheumatoid patients requiring steroid administration

Triamcinolone was not considered as the steroid of first choice for general use but was reserved as a 'special purpose' steroid, useful under certain conditions This conclusion was reached principally because of unique adverse reactions which it frequently produces

Dexamethasone was also considered more useful as a 'special purpose' steroid It may be employed to advantage in some patients whose conditions have become relatively unresponsive to other steroids and when appetite stimulation and weight gain are desirable

Fluprednisolone has not been appraised sufficiently long to warrant full assessment if its therapeutic efficiency To date, the drug has been a satisfactory antirheumatic agent, devoid of salt retention effects, and may prove to have a therapeutic index at least equal to prednisolone and methylprednisolone

2210 West Third St (57)

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Oxygen: The Antidote for Systemic Toxic Reactions from Local Anesthetic Drugs

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For many years barbiturates have been used for prophylaxis and treatment of systemic toxic reactions to local anesthetic drugs A study of 533 systemic toxic reactions and their treatment in 36,113 regional block procedures showed that (1) the reactions were a result, not of an allergy but of high concentrations of the drug in the blood (2) barbiturates used to treat such a reaction may do harm rather than good and may actually hasten the death of a patient, (3) barbiturates given preoperatively did not prevent reaction, (4) correction of oxygen want was the key to successful treatment of such a reaction, and (5) succinylcholine chloride, not a barbiturate, is now the drug of choice to stop convulsions and allow adequate oxygenation of the patient

SINCE the original work of Tatum, Atkinson, and Collins[1-2] in 1925 and 1926 in rabbits, dogs, cats, and monkeys, most physicians who use local anesthetic solutions have given a barbiturate routinely preoperatively to "protect" the patient against a systemic toxic reaction from the local anesthetic drug Furthermore, if a systemic toxic reaction occurs, these physicians immediately administer a barbiturate intravenously as the first step in the treatment of such a reaction

Today, neither the administration of a barbiturate preoperatively to prevent a systemic toxic reaction nor its empirical use to treat such a reaction seems rational to us It is the purpose of this paper to show that (1) barbiturates given preoperatively do not prevent systemic toxic reactions but only mask the early warning signs of such a reaction, (2) barbiturates given intravenously to treat such a reaction may do harm rather than good and may actually hasten the death of a patient, (3) administration of oxygen, not a barbiturate, is the rational therapy in treating a systemic toxic reaction from a local anesthetic, and (4) succinylcholine chloride (Anectine), not a barbiturate, is the drug of choice to stop convulsions and allow adequate oxygenation of the patient

Definition of Systemic Toxic Reactions

Systemic toxic reactions occurring after the injection of a local anesthetic drug are due to either a high blood level of the drug or a true allergy to it In most instances—98% or more—a systemic reaction indicates an overdose, i e, a high concentration of the drug in the blood for that particular individual, not a true allergy

Only reactions which may occur after the use of small or infinitesimal amounts of local anesthetic drugs can automatically be termed allergic A true allergy to a local anesthetic agent is characterized by one or more of the following dermatitis, angioneurotic edema, wheals, itching, asthmatic breathing, and "clinical anaphylactic shock" (While in most instances the word "anaphylaxis" is restricted to experimental animal work, it can be used in clinical allergy to denote shock[3])

The term "high blood level" indicates an overdosage of the drug for a particular individual A high blood level is caused by one or all of the following (1) too large a dosage of the local anesthetic drug, (2) unusually rapid absorption of the drug, (3) unusually slow detoxification, or (4) slowed elimination Usually such toxic reactions follow the use of large quantities of local anesthetic drugs in the following techniques local infiltration, peripheral nerve block, and epidural blocks (caudal and lumbar) Systemic toxic reactions are seldom seen when small quantities of the local anesthetic drugs are used in methods such as spinal (subarachnoid) block (see table)

This paper is limited to discussion of systemic toxic reactions from high blood levels of local anesthetic drugs and those rare instances of "clinical anaphylactic shock"

From the Mason Clinic

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Pharmacological Basis of the Signs and Symptoms of Systemic Toxic Reaction

Basically, the signs and symptoms of a systemic toxic reaction due to either the high level of the local anesthetic drug in the blood or clinical anaphylactic shock are those of (1) stimulation or depression or both after overstimulation of the central nervous system (cerebral cortex and vital centers in medulla) or (2) depression of the cardiovascular system[4-6] Death is usually attributed to respiratory depression[4-6]

While the signs and symptoms of a systemic reaction usually fit a typical pattern—i e, slowly progress from the signs of cortical stimulation (restlessness, etc) to the signs of severe depression and death, depending on the rapidity of recognition and therapy—the following variations may occur (1) all the signs and symptoms may occur simultaneously, (2) one sign may predominate, the others being less obvious and (3) the reaction may occur insidiously so that, if the patient is not being carefully observed, death may occur without warning

Systemic Toxic Reactions After Regional Block Procedures (January 1948, to December 1955)

Technique	Number	Minor Systemic Toxic Reactions (e g Restlessness Nervousness Apprehension)	Severe Systemic Toxic Reactions (Respiratory Arrest Convulsions Cardiovascular Collapse)
Caudal block			
Surgical	2 1[illegible]	31	9
Obstetrical	9 900	337	79
Epidural block	4 2[illegible]2	26	7
Subarachnoid block†	7 [illegible]77	0	1
Peripheral nerve block†	12 229	36	16
Total	36 113	4[illegible]9	112

* Continuous caudal block in obstetrics has a relatively high incidence of systemic toxic reactions because (1) a large volume (25 to 40 cc) and a relatively high concentration of local anesthetic solution are needed (2) the solution does not contain a vasoconstrictor drug because of the synergistic effects of a vasoconstrictor drug and an oxytocic drug may result in a cerebrovascular accident[1] (3) little or no sedation is used so as to allow father participation and not depress the baby[16 17] and (4) the sacral canal is highly vascular Piperocaine (Metycaine) hydrochloride 1 5% lidocaine (Xylocaine) hydrochloride 2% and chloroprocaine (Nesacaine) hydrochloride 2% are the drugs which are used in continuous caudal block for obstetrical deliveries Lidocaine 1 to 2% with 2 mg of tetracaine (Pontocaine) hydrochloride per cubic centimeter is the solution which is employed for surgical caudal blocks and epidural blocks

† Peripheral nerve blocks are performed with tetracaine hydrochloride solutions (1 mg of tetracaine hydrochloride per pound of body weight) and the solutions contain a maximum of 0 25 cc of 1 1 000 epinephrine solutions Subarachnoid block are performed with 4 to 20 mg of tetracaine hydrochloride Previous studies indicate that the incidence of systemic toxic reactions with this drug is small when used for peripheral nerve block and subarachnoid block[12] Ten of the 16 reactions after peripheral nerve block were respiratory arrest Only 1 of the 10 patients convulsed and this was due to the fact that the respiratory arrest was not treated immediately

Cerebral Cortex—The early signs and symptoms of cortical stimulation are one or a combination of the following restlessness, nervousness, apprehension, pugnaciousness, unreasonableness, loquacity, incoherent speech, headache, dizziness, blurred vision, metallic taste, roaring in the ears, nausea and vomiting, choreiform movements, tremors, and twitching These announce the existence of the initial phase of a systemic toxic reaction, a warning that the reaction may progress to convulsions because of excessive stimulation of the cortex by the local anesthetic drug and subsequent hypoxia Hypoxia or anoxia plays an important part in the reaction, for when the cells are stimulated their oxygen requirements increase markedly

Nausea and Vomiting—Nausea or vomiting or both may occur either early or late in the course of a systemic toxic reaction to a local anesthetic drug and may not indicate the severity of the reaction The vomiting center in the medulla may be stimulated by the excessive blood level of the local anesthetic agent, by hypoxia or by a combination of both

Respiratory System—In the very early stages of a reaction, the occasional patient may show an increase in the rate or depth, or both, of respiration from stimulation of the respiratory center in the medulla by the local anesthetic drug In almost all cases, irregular respiratory rate and excursion, sighing, dyspnea, periods of apnea, and, finally, complete respiratory arrest are a manifestation of depression of the respiratory center, presumably from its previous overstimulation Nevertheless, the part played by tissue hypoxia as the reaction progresses cannot be ignored

Cardiovascular System—When a reaction starts, there may be no initial variation in the blood pressure and pulse from that determined prior to the injection As respirations become shallow or cease, however, the blood pressure rises and a tachycardia ensues Such a reaction reflects either oxygen want or initial stimulation of the cardiovascular center in the medulla by the local anesthetic agent As the reaction progresses, the oxygen want becomes more severe, the blood pressure begins to fall, and a bradycardia appears If the hypoxia and hypotension are not corrected, the patient usually becomes more cyanotic, he perspires profusely, the skin is clammy, and syncope and peripheral vascular collapse develop with a weak and unobtainable pulse At least from a pharmacological standpoint, the hypotension which results from this type of reaction has usually been blamed on depression of the vital centers in the medulla as a result of previous overstimulation

In the light of recently published articles, however, the question arises as to whether this is the only responsible factor[7-10] These latter reports make it seem possible that hypotension which develops with the oxygen want might be at least partially caused by a direct depressant action of the local anesthetic agent on the myocardium Nevertheless, until further experimentation proves otherwise, it must be assumed that the oxygen want during a local systemic reaction from depression of the respiratory center from previous overstimulation by the drug is primary and that the cardiovascular collapse is secondary to it, i e, oxygen want is the cause of hypotension If the oxygen want, hypotension, and syncope are not

corrected within 2 to 10 minutes, cardiac failure and death may result

Rationale for Not Using Barbiturates to Prevent or Treat a Systemic Toxic Reaction

Prevention of Systemic Toxic Reactions With a Barbiturate—Tatum, Atkinson, and Collins [1,2] have not only thought that barbiturates arrest convulsions resulting from an overdose of local anesthetic agents in animals but also have noted that, when they are given prophylactically, the minimum lethal dose of the local anesthetic is increased four times The higher forms of animals, such as monkeys and man, having a more highly developed central nervous system, are thought to be more susceptible to the toxic actions of local anesthetic agents. Tatum and Collins showed that barbiturates afforded monkeys relatively more protection than the lower forms of the laboratory animals They concluded that humans, having an even more complex central nervous system than do monkeys, would therefore be afforded even greater protection Based on this work, a great number of publications on local anesthesia still stress the use of barbiturates prior to the injection of local anesthetic solution The action of drugs in laboratory animals are not necessarily those which occur in human beings Species variations are difficult to assess, and, if a correct evaluation of a drug's properties is to be made in the human being, its action in man is the ultimate criterion

The following are some practical reasons why we do not give barbiturates for this supposedly "protective effect" prior to nerve block analgesia First, they depress the cortex and thereby often obscure the early 'warning" cortical signs and symptoms of a toxic reaction, such as restlessness Second, they act synergistically to deepen the depression stage which follows overstimulation of the brain, particularly the vital medullary centers, thereby making the treatment of a reaction more difficult Third, they often make the patient uncooperative, and accurate acknowledgment of paresthesias, often necessary for the success of some block procedures, is difficult to elicit

Sadove and others [6] also feel that the usefulness of barbiturate prophylaxis has been greatly overrated and state, "We would even go further and say that barbiturates, being depressants of the central nervous system (and, therefore, so useful in counteracting the central nervous system stimulation type of reaction) will be decidedly harmful in those cases in which central nervous system depression follows on stimulation" Steinhaus [10] writes, 'Our experience in cocaine intoxication produced by constant intravenous injections revealed the antagonism of the barbiturates to be somewhat less effective than previous workers [Tatum and others] had reported" (Interpolation is ours) In addition, according to Knoefel and others,[11] barbiturates do not remove the possibility of toxic reactions and are of little use in those reactions which are a result of rapid absorption They claim, "As most of the cases of procaine intoxication seem to be of the type in which prophylaxis is unavailing, the practical value of administering barbiturates is small"

Treatment of a Systemic Toxic Reaction With a Barbiturate—Until 1956 our only indication for the use of a barbiturate in the treatment of a systemic toxic reaction was severe sustained convulsions which recurred so rapidly that the time interval between convulsions was so small that the patient could not be adequately oxygenated [12] In such instances small doses (50 mg) of thiopental (Pentothal) were given at half-minute intervals until the convulsions were controlled and the patient could be oxygenated Larger doses of this "short-acting" barbiturate given rapidly may stop convulsions sooner, but they add to the depression of the medullary centers and result in prolonged apnea Also, large doses of thiopental can cause marked depression of the cardiovascular system, and if this effect occurs, a depressed cardiovascular system may be further depressed

The drug which has been used intravenously by us for the past five years to allow oxygenation of the patient when severe sustained convulsions occur is a short-acting muscle relaxant, succinylcholine (Anectine) chloride

Correct Treatment of a Systemic Toxic Reaction

Regardless of whether the onset of the reaction is immediate or delayed, the treatment is the same, and rapid institution of correct therapy is essential if life is to be salvaged This is singularly true in the case of "clinical anaphylactic shock' from a true allergy Treatment of systemic toxic reactions depends upon the signs and symptoms exhibited, and these should be treated as they occur

Treatment of Cortical Signs and Symptoms—When the signs and symptoms of stimulation of the cortex, i e , anxiety, disorientation, and incoherent speech, appear, oxygen by bag and mask is immediately administered This is the first step in the treatment of any systemic reaction to a local anesthetic agent It seems reasonable to assume that, when the cortex and medulla are stimulated, the metabolic rate of their cells is greatly increased, and, therefore, the oxygen demand is increased manyfold If the oxygen requirement of these cells is not met, it follows that hypoxia of the cells, with a probable increase in CO_2 concentrations, will occur, and this in itself may result in convulsions, cardiovascular collapse, and death This premise has been experimentally substantiated by two separate investigations Tainter and Throndson [13] have shown in cats that, when artificial respiration is maintained during the intravenous in

jections of procaine, the animals will tolerate 2 to 10 times the amount of the drug which normally causes death They emphasize that, while the respiratory center is temporarily paralyzed, the artificial respiration assures oxygenation of the body The work of Steinhaus [10] also supports this theory Having shown experimentally that cardiovascular collapse due to respiratory paralysis can usually be prevented by artificial respiration, he concludes 'Since failure of respiration occurs more readily in local anesthetic intoxication than does failure of cardiovascular function, the maintenance of adequate ventilation is of primary importance even though the reaction may appear to be the result of acute cardiovascular collapse ' Our treatment of systemic toxic reactions as detailed in this paper seems to substantiate that this is also true in humans

While oxygen is being administered, an intravenous infusion is started if it was not started prior to the administration of the local anesthetic solution A careful check of the blood pressure, pulse, and respiration is maintained, and drugs necessary to treat serious sequelae such as hypotension or convulsions are readied for immediate intravenous injection in case the reaction progresses Likewise, suction, endotracheal tubes, laryngoscopes, and bronchoscopes should be on hand should the patient vomit and aspirate or become apneic or both If the patient vomits, the airway must be cleared by tracheal suction, and if aspiration takes place, bronchoscopy may be necessary to clear the trachea and bronchi of food particles

If cerebral stimulation progresses to convulsions, which are always accompanied by periods of apnea, or if convulsions are the initial indication of the reaction, oxygen still is the first therapeutic agent to use It has been our experience that in the greater number of cases oxygen alone has prevented convulsions or corrected them When a patient convulses, he is unconscious and the vocal cords are in spasm, thereby preventing oxygen from being delivered into the lungs When the convulsions stop, the patient is still unconscious and apneic but the vocal cords are no longer in spasm and oxygen may be delivered into the lungs by artificial respiration If the convulsions are short (1 to 10 seconds) and the period between them is long enough (10 to 20 seconds) to allow adequate oxygenation of the patient during the apneic phase of a convulsive episode, convulsions may be able to be controlled by oxygen, per se, and specific drug therapy aimed at stopping convulsions is not necessary However, if the patient has severe, sustained convulsions, then 40 mg (2 cc) of succinylcholine chloride should be given intravenously to paralyze the patient, relax the spasm of the cords of the larynx, and permit oxygenation of the patient

Since the patient is unconscious from the convulsion and since the action of succinylcholine chloride lasts four to five minutes, he is not aware of or subjected to the discomfort of being totally paralyzed Artificial respiration must be maintained until the apnea or the period of depressed respiration from either the local anesthetic drug or the succinylcholine is over

Treatment of Respiratory Signs and Symptoms — The early sign of stimulation of the respiratory center in the medulla by local anesthetic agents is usually only an increased rate or depth of respiration, or both—often very transient, seldom noted, and requiring no treatment On the other hand, depression of the respiratory center from overstimulation by these drugs results in respiratory failure Respiratory failure should be treated immediately by administration of oxygen by bag and mask and, if necessary, artificial respiration

Drugs which normally stimulate the respiratory center, such as nikethamide (Coramine), pentylenetetrazol (Metrazol), or picrotoxin, are contraindicated, since the respiratory depression is due to previous overstimulation from the anesthetic drug Under these circumstances, such drugs would only add to the depression of the respiratory center Likewise, the routine use of a barbiturate, whenever it appears that a toxic reaction has occurred, is to be condemned, since the depressive action of the barbiturates on the central nervous system would only further depress the respiratory center

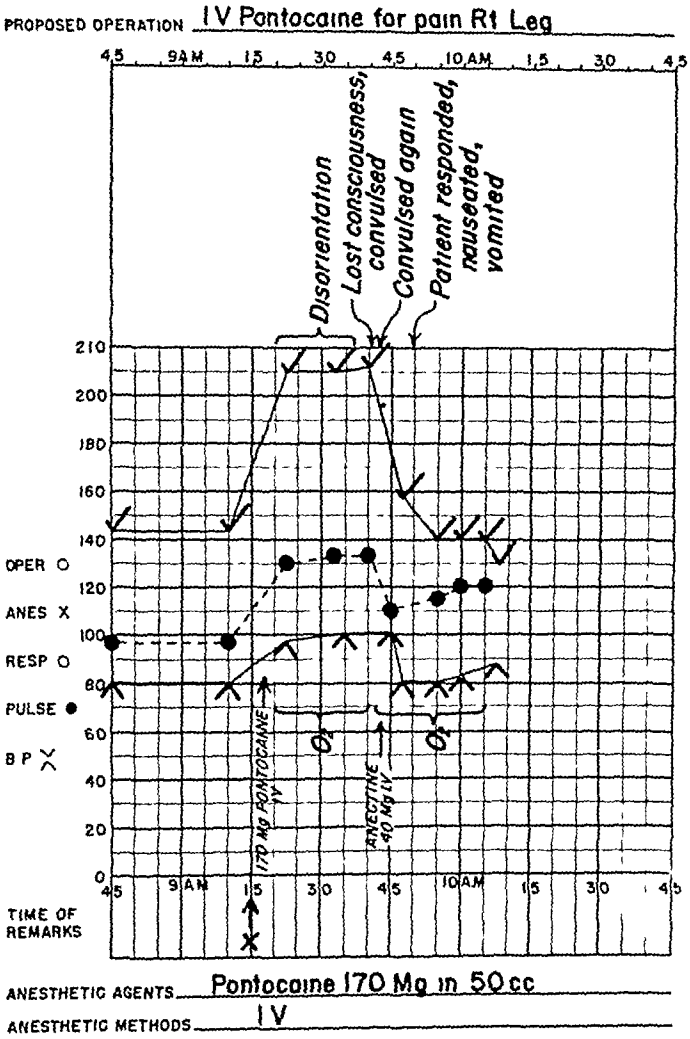
Treatment of Cardiovascular Signs and Symptoms —Since it is not safe to assume that cardiovascular collapse automatically accompanies, precedes, or follows respiratory failure, the blood pressure and pulse should be checked before treatment aimed at the cardiovascular system is instituted The early signs and symptoms of cardiovascular involvement are hypertension, increase in pulse rate, and, occasionally, cardiac irregularities They reflect a stimulation of the cardiovascular center in the medulla or hypoxia or both The late signs and symptoms are hypotension, absent pulse, and a weak or absent heart beat They reflect a depression of (1) the cardiovascular center in the medulla, (2) the myocardium, per se, or (3) hypoxia, or all three Regardless of which occurs, the initial treatment is the administration of oxygen Then a vasoconstrictor drug, usually one which will strengthen cardiac action as well as constrict the blood vessels, is given intravenously to correct the hypotension If cardiac failure occurs, it must be treated by manual systole

Report of a Case

The following case report will illustrate the effectiveness of the above-detailed treatment of a systemic toxic reaction (see figure) A 49-year-old woman with the diagnosis of tabetic crises was to be treated with intravenously given tetracaine to

ascertain whether or not it would relieve her pain On two previous occasions 170 mg of tetracaine in 50 cc of isotonic sodium chloride solution had been administered over a 15-minute period with only the signs and symptoms of a minor systemic toxic reaction, i e, metallic taste in her mouth, roaring in the ears, dizziness, and slight nausea

It was decided that on this admission she should receive the same dosage of tetracaine within a 5-minute period rather than within a 15-minute period The patient arrived in the anesthesia room at 8 45 a m, the blood pressure cuff was applied, a pressure of 144/80 mm Hg was obtained, a pulse of 98 per minute was recorded, and an intravenous



Data in patient given oxygen for systemic toxic reaction from tetracaine (Pontocaine)

drip of 5% glucose in distilled water was started with a 16-gauge plastic needle At 9 15 a m, the administration of the solution of 170 mg of tetracaine in 50 cc of isotonic sodium chloride solution was started, and at 9 20 a m she became restless and disoriented and had a blood pressure of 205/98 mm Hg and a pulse of 130 per minute Oxygen by bag and mask was administered for the next 20 minutes with no change in the patient's condition At 9 40 a m the oxygen was prematurely removed It should have been administered until the blood pressure and pulse indicated that the high level of tetracaine in the blood no longer was present At 9 41 a m the patient started to convulse, she urinated, the blood pressure was 206/100 mm Hg, and the pulse was 134 per minute Oxygen was again administered by bag and mask, but, because the convulsions were sustained with little or no interval between them and the vocal cords were in constant spasm, adequate oxygenation of the patient was impossible At 9 43 a m 40 mg of succinylcholine chloride was given intravenously, and at 9 45 a m convulsions ceased Relaxation of the vocal cords ensued, allowing adequate oxygenation of the patient by bag and mask At 9 50 a m the patient responded, nausea and vomiting occurred, and she was able to expel the vomitus with no difficulty At 9 55 a m adequate oxygenation of the patient had occurred, respirations had returned to normal, the blood pressure was 140/80 mm Hg, and the pulse was 115 per minute At 10 05 a m the oxygen was removed, and at 10 20 a m she was returned to her room On postoperative rounds that afternoon she had no untoward effects from the episode, nor did she recall the experience other than to state that she "blacked out"

Comment

From January, 1948, to December, 1959, we performed 36,113 regional block procedures Four hundred and thirty minor systemic toxic reactions occurred, and they were treated with oxygen alone (see table)

Ten patients exhibited unconsciousness and apnea as the only signs of a severe systemic toxic reaction from a high level of the local anesthetic drug (tetracaine) in the blood All 10 were given artificial respiration with oxygen by bag and mask, they recovered from the apnea in 10 to 20 minutes, and surgery proceeded with no sequelae

Ninety-three severe systemic toxic reactions with convulsions were observed The convulsions of 84 of the 93 patients were stopped by the administration of oxygen by bag and mask Five of the remaining nine patients who had convulsions were treated prior to Jan 1, 1956, and intravenously given thiopental was used to control the convulsion so that the patient could be oxygenated After the administration of the intermittent doses of thiopental (50 mg, total dosage did not exceed 300 mg in any patient), the patient responded after 30 to 45 minutes but did not fully regain consciousness for two to three hours The remaining four patients were treated after Jan 1, 1956, and received 40 mg of succinylcholine intravenously They responded within 10 to 15 minutes after the 4 to 10 minutes of apnea and were fully aware of their surroundings in 30 to 45 minutes, but they had no recollection of the convulsive episode or the time they were paralyzed There was one death, which has

been reported previously and which was not attributable to a systemic toxic reaction [14]

The pharmacological basis for a systemic toxic reaction has been attributed to (1) excessive stimulation of the brain cell by the local anesthetic drug, with subsequent depression of the respiratory and cardiovascular centers in the medulla from overstimulation, and (2) direct depression of the myocardium The hypoxia or anoxia which accompanies such a reaction is often inadequately stressed The correction of the oxygen want is the key to the successful treatment of the reaction To correct the hypoxia or anoxia, oxygen must be delivered to the alveoli and circulation must be maintained so that the oxygen may reach the tissues

Any physician employing a local anesthetic drug in his practice must be capable of (1) establishing a clear airway and maintaining it (2) delivering oxygen to the lungs and alveoli by means of artificial respiration, (3) starting intravenous administration of fluids, (4) raising the blood pressure with vasoconstrictor drugs, and (5), if necessary, instituting manual systole These are the fundamentals of the treatment of severe systemic toxic reactions

Summary

Five hundred and thirty-three systemic toxic reactions occurred subsequent to 36,113 regional block procedures This study indicates that such reactions result from (1) stimulation of the brain cells by the local anesthetic drug with subsequent hypoxia of the brain cells or (2) direct depression of the myocardium from local anesthetic agent resulting in slowed circulation and hypoxia and that (3), if the oxygen requirements of the brain cells are met and the heart action supported, the reaction will subside as the local anesthetic drug is detoxified The review showed that (1) barbiturates given preoperatively do not prevent systemic toxic reactions but only mask the early warning signs of such a reaction, (2) the first step in the rational therapy of a systemic toxic reaction from a local anesthetic is the administration of oxygen, not a barbiturate (3) effective oxygen therapy administered by bag and mask when the first warning signs of a systemic toxic reaction appear will often prevent such a reaction progressing to the stage where convulsions or cardiovascular and respiratory collapse, or both, ensue, (4) anticonvulsive drug therapy is indicated only when convulsions prevent oxygenation, (5) if severe sustained convulsions should occur, succinylcholine chloride (Anectine), not a barbiturate, is the drug of choice to stop the convulsion and allow adequate oxygenation of the patient, and (6) barbiturates given intravenously when convulsions, cardiovascular collapse, or respiratory collapse occur may do harm rather than good and may actually hasten the death of a patient

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Idiopathic Disseminated Focal Arteritis

Occurrence of False Aneurysms in Large and Medium-Sized Arteries

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The medical histories of three men, aged 17, 36, and 44, presented an unusual form of arteritis There were symptoms and signs of a generalized systemic disease, with cutaneous erythematous nodules and multiple pulsating tumors of large and medium-sized arteries The cutaneous nodules on histopathologic examination resembled those of erythema nodosum, and the pulsating tumors were false aneurysms probably arising from a tear in the artery in an area of focal arteritis The false aneurysms had developed during intervals of weeks or months These cases represent a unique and probably rare clinical entity

IDIOPATHIC disseminated focal arteritis of large and medium-sized arteries has been observed but has not been reported as a clinical syndrome We have observed two patients and reviewed the records of another seen at the Mayo Clinic who have had multiple episodes of focal arteritis involving large arteries and resulting in rupture of the wall of the artery at the site of inflammation, with the formation of a false aneurysm We believe that these cases are distinct enough from other well-recognized forms of arteritis to represent a clinical entity

The case which we reviewed was reported by Pemberton and Mahorner[1] in 1932 as a case of thromboangiitis obliterans with aneurysmal formation When we compared this case with the two cases which we had observed, it seemed to fit a syndrome of non-specific disseminated focal arteritis with formation of false aneurysms better than that of thromboangiitis obliterans For this reason we are including it among the cases which we are reporting

These patients had symptoms and signs of generalized systemic disease with erythematous cutaneous nodules, which were considered due to superficial phlebitis in the report by Pemberton and Mahorner but which also are suggestive of erythema nodosum or nodular vasculitis

Report of Cases

CASE 1 —A 17-year-old white youth registered at the Mayo Clinic on Aug 6, 1956 In the fall of 1953, at the age of 14 years, he had noticed soreness and stiffness of the muscles with erythematous cutaneous nodules in the left leg Nodules later appeared in the right leg In the summer of 1954 he again noticed soreness and stiffness, but the nodules had disappeared In the fall of that same year symptoms and the nodules recurred in the left leg with severe, persistent pain In the summer of 1955, the pain, soreness, and nodules disappeared, but recurred in the fall In 1956, he noted continued soreness and stiffness, with the erythematous nodules involving the anterior aspects of both legs and, for the first time, the upper extremities Three weeks before admission to the clinic, severe pain developed in the left calf muscle with associated coldness, blueness, and numbness of the feet

Examination on admission revealed a temperature of 99 6° F (37 5° C), a heart rate of 120 per minute, and blood pressure of 130 mm Hg systolic and 85 mm diastolic Several red, firm, tender areas were present on the left calf and a larger tender swollen area was found on the anterolateral aspect of the left leg Pulsations were reduced in both posterior tibial arteries Pulsation was not felt in the left dorsalis pedis artery

Results of laboratory tests were essentially negative except for the following findings Prothrombin time was 21 seconds (normal 17 to 19 seconds), sedimentation rate (Westergren method) was 77 mm in one hour, blood smears showed marked rouleaux

The possibility of periarteritis nodosa was entertained, and the patient was taken to the operating room on Aug 10, 1956, for a biopsy of the anterior

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tibial muscle On making an incision over the anterior crural compartment one of us (P J K) noted active arterial bleeding Careful retraction of some necrotic muscle indicated that the bleeding was from the anterior tibial artery Because the patient had been given adrenal steroid medication previously, we had planned to remove the specimen under local anesthesia It was felt wise to return him to his room and to prepare him by administering cortisone so that a more extensive exploration could be done under general anesthesia

On Aug 17, the entire anterior crural compartment was exposed through an anterior incision On retraction of the necrotic muscle a small rent was found in the anterior tibial artery through which active bleeding was occurring The artery was doubly ligated above and below the rent and divided, a large amount of old, partially organized clot was removed The wound was closed with a drain which was removed three days later Because of the severe necrosis of the anterior crural muscles the patient was fitted with a short leg brace and instructed to take 50 mg of cortisone every six hours for a month He was dismissed from the clinic on Sept 5, 1956

During the next year, we learned from correspondence with his physician that a pulsating swelling had developed in the patient s left wrist On exploration a leaking radial artery and an associated false aneurysm were found In November, 1956, a similar painful pulsating swelling developed on the inner-medial aspect of the left knee This mass subsided spontaneously In March, 1957, a pulsating swelling was noted in the left calf This was explored elsewhere and a rent in the left posterior tibial artery was noted, according to correspondence with his physician In May, 1957, a pulsating swelling developed on the dorsum of the right foot, this subsided spontaneously

On May 29, 1957, the patient returned to the clinic for re-examination His general health was much improved although he was having recurrent crops of erythematous nodules on the lower extremities Examination at this time revealed that pulsations were normal in all the arteries except for both posterior tibial and dorsalis pedis pulses, which were somewhat reduced The patient had a patchy livedo reticularis over both feet and legs Blood pressure was 160 mm Hg systolic and 70 mm diastolic, and the sedimentation rate was 27 mm in one hour He had been able to discard his short leg brace and walked with a barely perceptible limp The drop foot present previously had improved, owing to the development of a spontaneous tenodesis from the fibrosis of the three muscles of the anterior crural compartment

A letter from his physician in April, 1959, stated that a pulsating swelling had developed in the left distal anteromedial portion of the thigh which required surgical exploration A small rent or hole was found in the distal femoral artery which was surrounded by a false aneurysm This section of the artery was excised and replaced with a crimped polytetrafluoroethylene (Teflon) prosthesis When he was last heard from in July, 1959, another pulsating swelling had developed in the left leg and had subsided spontaneously

Case 2[2]—A 36-year-old unmarried farmer registered at the clinic on Dec 2, 1933 His chief complaint was pain and swelling behind the right knee, which had begun suddenly one week before admission For three years this patient had had recurring episodes of soreness, tenderness, pain, and painful red nodules in the skin of the fingers, toes, heels, ankles, and legs For one year he had had blurring of the vision of his right eye

Fig 1 (Case 2) —Arteriogram, revealing false aneurysm in popliteal artery

Examination revealed a firm, tender, pulsating mass in the right popliteal space, with central choroiditis of his right eye A femoral arteriogram made with the technic devised by Allen and Camp[3] showed filling of a hollow soft tissue area which

was communicating with a normal-appearing right popliteal artery (Fig 1)

On Dec 12, 1933, the right popliteal region was explored and a large false aneurysm was found This was evacuated and a portion of the artery 2 5 cm long was resected after ligation of the artery above and below the lesion

The patient did well except for recurring bouts of erythema nodosum until November, 1937, when severe pain developed in the left calf This improved without treatment On Jan 15, 1938, the pain recurred and the patient was admitted to the hospital On Feb 7, the left popliteal space revealed a situation exactly similar to that previously noted in 1933 Again it was necessary to ligate the popliteal artery above and below the diseased segment and excise the segment with the perforation The patient appeared to do well after this surgical procedure, but two weeks later a painful pulsating mass suddenly developed in his right mid-thigh, the mass subsided and then recurred On Mar 10, the right mid-thigh region in the area of Hunter's canal was explored A false aneurysm was found, which appeared to be forming from two or three separate small rents in the femoral artery The gross appearance was very similar to the situation that had been noted behind the knee in the popliteal space Approximately 3 in of artery and vein including the leaking areas were removed Both vessels were doubly ligated above and below

On Mar 15, 1938, a pulsating mass appeared in the right lower quadrant of the abdomen and femoral triangle This mass enlarged rapidly but then subsided in two weeks In November, 1942, the patient was again admitted to the clinic, at this time because of intermittent abdominal pain He was observed only at this time, and over a two-month period this pain gradually subsided In March, 1943, he returned because of persistent abdominal pain which was increasing in severity On Mar 10, abdominal exploration was carried out, but no lesion was found to explain the pain However, several hard nodules on the peritoneal surface of the left hemidiaphragm suggested residual lesions of necrotizing arteritis In October, 1943, this patient was hospitalized at the University of Minnesota Hospital in Minneapolis, where a large, pulsating, rapidly enlarging abdominal mass was found According to a reliable oral report, the patient died of an intra-abdominal hemorrhage from a rent in the abdominal aorta The condition of the abdominal aorta apparently was quite similar to that in the patient's extremities

Case 3—This case was previously reported by Pemberton and Mahorner [1] The patient, a 44-year-old building contractor, registered at the clinic on Nov 13, 1925 He stated that in January, 1924, he had noticed fatigue, soreness, and tenderness of both legs at rest and on exercise He stated that he had recurring areas of red, subcutaneous nodules first noted in the left leg and five months later in the right leg For 10 months he had had no nodules but had recurring episodes of fatigue and soreness in the legs In March, 1925, swelling of both lower extremities and also painful areas of localized swelling in both popliteal fossae began to appear On Nov 13 the pain and the erythematous nodules recurred on the lower extremities

Examination at the time of admission to the clinic revealed blood pressure of 115 mm Hg systolic and 80 mm diastolic, and a temperature of 97 4° to 98 8° F (36 3° to 37 1° C) Slight edema of the ankles and legs was present, together with a pulsating mass in each popliteal space The left popliteal mass measured 9 by 14 cm and the right popliteal mass 6 by 12 cm Arterial pulsations were present in the lower extremities

On Dec 4, 1925, the mass in the left popliteal space was explored The surgeon found a true aneurysm and a false aneurysm The popliteal artery was ligated proximally and distally The aneurysmal sac was obliterated by continuous suture and left in situ On Dec 29, the patient complained of pain and tenderness in the left thigh A pulsating mass had developed over the superficial femoral artery and was increasing rapidly in size On Jan 6, 1926, the previously mentioned right popliteal mass was explored Two openings were found in the popliteal artery in what appeared to be grossly normal arterial wall After evacuation of the organized thrombus from the false aneurysmal sac, the popliteal artery was ligated above and below the site of perforation The false aneurysmal sac was obliterated by continous suture and left in situ On Feb 15, 1926, the mass in the left femoral area was explored A false aneurysm with a large blood clot surrounding it was noted The mass measured 7 cm in diameter The artery was ligated above and below the false aneurysmal sac The patient made a satisfactory recovery from his multiple operations No apparent additional abnormality was evident in the circulation of the right lower extremity The patient was dismissed from the clinic on Mar 1, 1926

In March, 1927, a letter from the patient stated that he continued to have severe pain in his legs and recurring red nodules In April, 1929, the attending physician wrote that painful tender nodules were present in the upper extremities Apparently the patient's condition was unchanged

On Nov 17, 1930, this patient was examined by a clinic physician who stated that circulation was adequate in both legs This implies that arterial pulsations could be felt Several areas of red, raised nodules were noted on both legs and feet and some swelling of the feet and legs The appearance of the legs suggested a deep thrombophlebitis

The last communication with the patient was in 1938, in answer to a routine inquiry sent out to

obtain information about his condition The patient stated that his health had been poor and that he continued to have pain and recurrence of the red nodules in his lower extremities In that interval he had had no more operations Since that time he has not been heard from

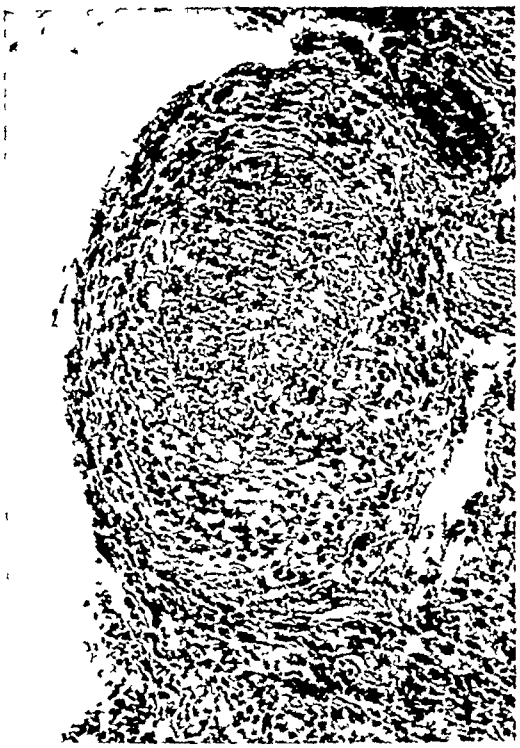

Fig 2 (Case 1) —Subacute granulomatous vasculitis of small arteriole in skin from area of erythema nodosum (hematoxylin and eosin stains, ×175)

Many features of this patient s course are similar to the course of the other two patients He did have one small aneurysm which was neither atherosclerotic nor typical of the type of lesion seen in thromboangiitis obliterans Even as long as seven years after the onset of the symptoms there was no objective evidence of occlusive arterial disease He may have had recurrent idiopathic thrombophlebitis, but this seems unlikely as most of the lesions thought to have been those of active superficial phlebitis seem to us to be more suggestive of erythema nodosum than of superficial phlebitis We know of no cases of proved thromboangiitis obliterans in which aneurysms of medium-sized or large arteries of the extremities have been seen at the clinic since 1925 nor of any cases that have been reported in the literature

Patients who have throamboangiitis obliterans as they get older may have atherosclerosis and atherosclerotic aneurysms of the peripheral arteries but the small aneurysm in the popliteal artery in this patient was not an atherosclerotic aneurysm

Pathologic Findings

Material was available for pathologic examination in two of these cases An excellent section of one of the erythematous nodules was obtained in Case 1 This section of tissue was obtained at home and forwarded to the clinic The sections were interpreted by the pathologist at the clinic as showing subacute granulomatous vasculitis and perivasculitis involving a small cutaneous arteriole from an area of erythema nodosum (Fig 2) In Case 1

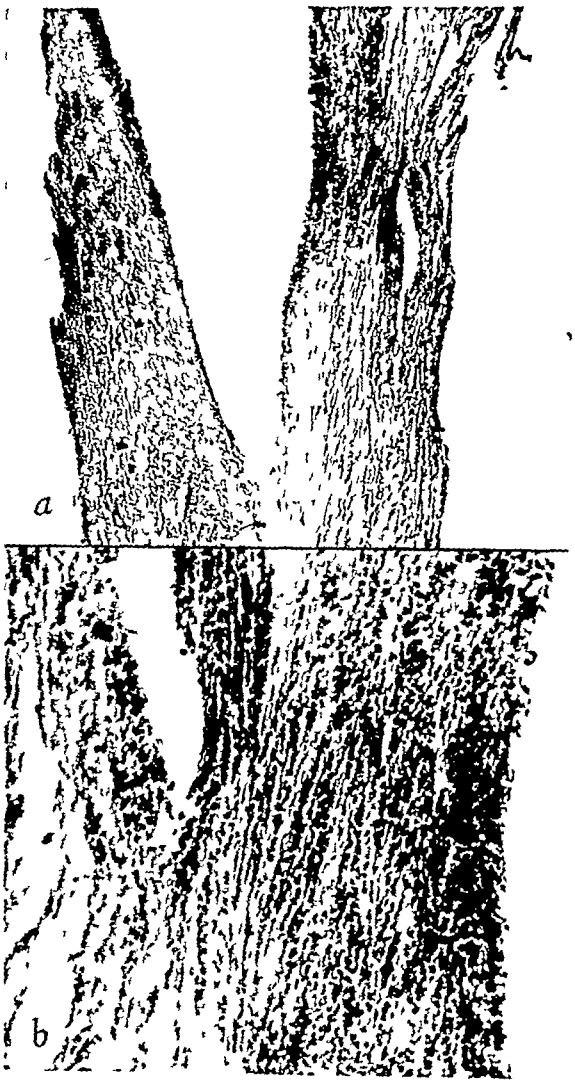

Fig 3 (Case 1) —Longitudinal section of radial artery a, Inflammatory reaction is present throughout wall of artery (hematoxylin and eosin stains, ×55) b, Higher magnification also reveals inflammatory cells in vessel wall (hematoxylin and eosin stains, ×200)

also we were sent multiple sections of the posterior tibial artery As stated in the case report, this artery had perforated and formed a false aneurysm Longitudinal sections of the artery revealed an inflammatory reaction throughout the wall Under high power, inflammatory cells were seen in the wall of the vessel (Fig 3)

On examination of the first specimen of the right popliteal artery in Case 2 it was thought that the rupture had occurred through a localized degenerative lesion in the popliteal artery Nonetheless, several areas of focal arteritis had been noted in this specimen Subsequent specimens removed from this patient, especially the section of the femoral artery removed in March, 1938, showed more clearly that the rupture occurred through an area of focal arteritis, with localized necrosis causing a weakened area in the arterial wall

Comment

The common feature of these three cases is that the patients were young men at the onset of symptoms of aching, pain, and erythematous nodules appearing in the extremities Subsequently, pulsating tumors developed in the extremities In all instances in which these pulsating tumors were surgically explored, except one, they proved to be false aneurysms, probably arising from a small rent in the wall of an artery In the one exception a small true aneurysm was noted The evidence, from available histopathologic sections, indicates that the rupture occurred through an area of focal arteritis

Although the inflammatory process appeared to be focal, it involved the entire wall of the artery Inflammatory cells appeared to be a mixture of round cells and polymorphonuclear leukocytes as illustrated in Figure 3 *a* and *b* A section of one of the nodules of the skin revealed a subacute granulomatous vasculitis of the small skin arteries (Fig 2)

None of the patients, so far as we can tell, subsequently presented a clear-cut picture of rheumatoid arthritis, thromboangiitis obliterans, periarteritis nodosa, or systemic lupus erythematosus In no way does our study seem to indicate that these patients had bacterial endocarditis which might have produced mycotic aneurysms

Summary

In the three cases reported, multiple pulsating vascular tumors developed during intervals of several weeks or several months All of these lesions occurred in arteries of the extremities, with the exception of Case 2 in which the aorta was involved The areas of involvement were the radial anterior tibial, posterior tibial, dorsalis pedis, popliteal, and femoral arteries These three cases are presented as indicative of an apparently rare clinical entity which is characterized by focal arteritis and subsequent rupture of the large and medium-sized arteries of the extremities associated with erythematous nodules in the lower and sometimes the upper extremities

Drs Bruce Murphy of Kennewick, Wash, and Dean Crystal of Seattle provided valuable follow-up information in Case 1, and Drs C W Westman of Kennewick, Wash, and J B Holyoke of Seattle provided the pathological material on Case 1 Dr M B Dockerty of the Mayo Clinic aided in interpretation of the histologic sections

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TUBERCULOUS MENINGITIS—Dangers and Difficulties remain in the treatment of tuberculous meningitis The problems are twofold Many of the patients who have been diagnosed only in the later stages of the disease still die Further, though treatment has become easier since the introduction of isoniazid, many centres still insist upon the administration of intrathecal streptomycin in most cases, for at least the first few weeks of the illness Others rely on systemic treatment only and claim that intrathecal therapy is unnecessary, distressing to the patient and possibly even deleterious Since no controlled trial has been described, the experience which is given below may help in resolving these problems Thirty-nine patients with tuberculous meningitis have been treated between September 1953 and March 1958 and followed up to the end of 1958 Thirty-two (82 per cent) survived Twenty-six patients received intrathecal streptomycin and 13 none All were given systemic isoniazid, p-aminosalicylic acid and often streptomycin Though retrospective, the results suggest that when consciousness is only slightly or moderately impaired, intrathecal streptomycin is unnecessary In advanced cases, the mortality is still very high despite the use of corticosteroids, tuberculin and surgical measures early diagnosis remains imperative—A Pines, Tuberculous Meningitis Since the Introduction of Isoniazid Tubercle, April 1960, p 117

Otorhinolaryngological Considerations on the Temporal Arteritis Syndrome

J H Font, M D, San Juan, Puerto Rico

Inflammation of the temporal arteries of the scalp was observed in 3 patients The temporal arteritis syndrome is a puzzling, distressingly painful disease The constantly shifting angiitis gives this syndrome a protean nature characterized by successive exacerbations and remissions Variability in the distribution of the vascular pathology plays a part in the causation of head and face symptoms that may simulate any number of otorhinolaryngological conditions Temporal arteritis can be a protracted disease capable of irreparable damage Proper treatment with the corticosteroids must begin immediately after diagnosis is suspected and must be continued throughout the course of the disease

TEMPORAL arteritis is the name given to a local and systemic symptom-complex that attacks persons in the later years of life As the name implies, a regular feature is inflammation of the temporal arteries of the scalp, but the disease is not confined to these vessels, and any of the cranial arteries may be involved as well as many arteries elsewhere [1]

Prior to the development of the full-blown picture of temporal arteritis, the victims usually suffer, for a variable period, from a generalized, debilitating, subacute febrile disease following a mild nasopharyngitis or upper respiratory infection Thoughout its entire course, the disease is associated with an increased erythrocyte sedimentation rate and, occasionally, also with an abnormal electrophoretic pattern of the serum

Differential Diagnosis

The disorder can be definitely identified only on the basis of histological changes observed in the vascular wall, generally reported as a thickening of the vessel wall due to an inflammatory reaction A histological differential diagnosis between temporal arteritis, thromboangiitis obliterans, periarteritis nodosum, and 'pulseless disease" may be difficult

However, the severity of the headaches, impairment of hearing, vertigo, and a variety of forms of neuralgias simulating any number of otorhinolaryngological conditions may all precede the obvious temporal arteritis which, for the time being, may hardly be suspected The differential diagnosis could be a challenge to physicians, were it not for the fact that we are now more generally aware of the role played by vascular pathology in the causation of head and face symptoms The neuralgias, including the sphenopalatine ganglion syndrome, are now looked upon as manifestations of malfunction of the extracranial vessels [2] The fact remains that the aforementioned local manifestations are the principal symptoms in which the circulatory system plays a part throughout the whole course of this protracted malady and with which the otolaryngologist is chiefly concerned

Variability in the distribution of the vascular pathology and in its outcome and protean manifestations characterize this distressingly painful and puzzling disease

I am reporting three new cases which had the following characteristics in common the mode of onset, the patients' age, and the fact that all were stress-blind" males undergoing the climacteric Areas of apparent greater vulnerability were, however, different The following are typical case presentations of the more frequent forms of the syndrome, that is, the migrainous type, the 'cranial arteritis' type, and the nonspecific type

Reports of Cases

CASE 1 (The migrainous type)—A man was first seen by me in 1944, at the age of 51 years, because of continuous pain in the right temporal area and otalgia of two months duration The patient had had periodic migrainous attacks involving the supra-orbital and occipital regions since childhood Physical findings on Aug 24, 1944, were limited to a sensitive right 1st bicuspid that presented three fillings—gold, alloy, and porcelain, respectively—around the base of the tooth The patient was re-

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feared for dental care and was lost sight of

In 1951, he attended the Walter Reed Hospital for intermittent claudication of his right lower extremity By then, the pain in the head was affecting the same side, repeatedly During the episodes of two or three days' duration which recurred every two weeks, the throbbing, intolerable pain affecting the right ear appeared at the same time day or night, arousing the patient in the early morning hours and obliging him to pace the floor His symptoms never were related to particular activities or to food intake No vomiting or nausea occurred Treatment with ergotamines was not effective

In 1954, the patient attended the Mayo Clinic for recurring headaches on the right side He was given histamine desensitization and seemed better for four months

On Nov 17, 1955, the patient returned to me, this time complaining of recurrent distressing pain in the right temporal region accompanied by tenderness, swelling, and inflammation of the right temporal artery, which was found palpable from the temporomandibular articulation to the vertex of the skull The pain in the right temporal area had been present continuously for 10 days and had involved the right ear in a sharp and shooting fashion, with tenderness of the auricle and of overlying skin of the whole area The episode described above was ushered in by "grippe" symptoms

My suspicion of "temporal arteritis" as the cause of his recurrent headaches was confirmed clinically at Johns Hopkins Hospital, where 2 cm of the right temporal artery were removed on Aug 3, 1956 At Johns Hopkins Hospital, the conclusion had been reached that, although the picture was not typical, this might be the best diagnosis The patient continued free of recurrences until his death from leukemia on March 12, 1958

Case 2 ("cranial arteritis" type)—A high-strung 69-year-old man presented himself at my office on May 10, 1954, in great distress and with a history of having felt well up to 7 months prior to arising with a stiff neck, severe frontal headache, a feeling of tightness about the circumference of the head, sore throat, hoarseness, fever, and "weakness" of the jaw musculature These stormy and distressing symptoms gradually subsided, leaving in their wake the ever-present headache, painful, tender areas over the scalp and along the temporal and occipital vessels, dizziness, weakness, loss of weight, and reduction in hearing The hyperalgesia of the scalp was a distinct phenomenon invariably made worse by exposure to drafts and dampness He found relief from the intense pain and insomnia by the use of "air pillows," but nothing seemed to help the pounding and tenderness of his already prominent, tortuous, and inflamed temporal arteries on both sides The patient felt nervous and irritable, a condition readily aggravated by bright lights, and was admitted to the Presbyterian Hospital on May 10, 1954 He was given cortisone with a "very good" response to the steroid, as he was at last relieved of the headaches 48 hours after administration of the first dose (100 mg.) intramuscularly, every 12 hours The patient received a total of 3,100 mg and, on discharge, was allowed to take home enough of the drug in tablet form (25 mg, thrice daily) to suffice for a few more days

On admission the blood pressure was 140/80 mm Hg, pulse rate 72, and respirations 24 per minute, hemogram normal, urinary findings negative, and erythrocyte sedimentation rate 40 mm per hour Ophthalmic observations were "arteriosclerotic retinopathy (there seems to be a slight swelling of the retinal vessels)" Findings of otological examinations were "normal response to caloric tests" Audiometric and tunning-fork tests revealed "bilateral perception deafness, moderately advanced" Neurological examination gave essentially normal findings

On July 19, 1954, the patient sought readmission for tinnitus, aggravated impairment of hearing, vertigo and a constant sensation of drunkenness of one month's duration The patient was admitted with the diagnosis of Ménière's syndrome and temporal arteritis Blood pressure was 120/80 mm Hg, pulse rate 80 per minute, and temperature 36 6°C (97 9°F) A hemogram showed 33% eosinophils (due to *Uncinaria* infestation), and an erythrocyte sedimentation rate of 38 mm per hour

Neurological findings at this time were still normal The symptoms disappeared promptly under treatment with cortisone, nicotinic acid, and a salt-free diet The patient was discharged on July 27, 1954

On March 30, 1957, the patient was again admitted to the Presbyterian Hospital, this time for "weakness of his left arm, paresis of the tongue, palate, pharynx, and larynx of six months' duration" At home he had suffered several attacks of vertigo, and his hearing had worsened coincidentally with occipital and temporal headaches of greater severity The deafness and vertigo proved to be antecedents of further cerebrovascular pathology, which was confirmed during his last hospitalization

The final diagnoses were (1) temporal arteritis, (2) thrombosis of branches of the right middle cerebral artery, and (3) previous thrombosis of branches of the left middle cerebral artery The patient was discharged in much improved condition under treatment with prednisone and nicotinic acid on April 11, 1957 Three months after the patient's release from the hospital, we were notified of his death due to a cerebrovascular accident

The third patient has so far resisted a generalized shifting vascular pathology, thanks to treatment with the newest of the adrenocorticosteroids, dexamethasone

Case 3 (nonspecific type)—A man, aged 63 years, had been in good health until the onset of the illness for which he sought treatment In the middle of April, 1959, he suffered from an acute nasopharyngitis A week later, pain had developed in the head A constant and severe retro-ocular pain,

disturbing his sleep and causing almost complete unwillingness to eat, sent him to an ophthalmologist who found no deviation from the normal and referred the patient to the otorhinolaryngologist for examination of the paranasal sinuses

In spite of the negative rhinological, dental, and roentgenological findings, the pains in the head and face persisted Systemic reactions, such as fever, chills, sweating, general malaise, weakness, insomnia, anorexia, and loss of weight, accompanied the disease process One of the reasons for the restless sleep and insomnia was pain along the brachial arteries (Inflammation of these arteries on both sides had occurred several times)

Use of antibiotics, sulfonamides antihistamines histamine, vitamins, and ergotamine injections was of no avail Aspirin and codeine gave relief The intense retro ocular pain was promptly followed by painful limitations of the ocular rotations and by claudication of the muscles of the jaw and tongue Continuous bilateral supraorbital, infraorbital, and temporomandibular neuralgias and pain in the teeth added to the distress of the patient

Meanwhile, a series of roentological examinations and laboratory analyses, including electrophoretic and bone marrow studies which were performed before the appearance of the pathognomonic signs of the syndrome, were suggestive of multiple myeloma Because of this latter possibility, the patient was transferred for further observation

While undergoing a thorough clinical investigation, the patient developed a full-blown picture of temporal arteritis, accompanied by the constitutional symptoms previously described, plus occasional claudication of the extremities, pain in the chest of low intensity, and widespread aching in the muscles, including the muscles of mastication, and severe dentalgia The erythrocyte sedimentation rate was persistently increased, whereas the hemogram was always normal The electrophoretic pattern of the serum on 3 different occasions was within normal levels, the Bence Jones proteins in the urine were absent, and bone marrow studies failed to show any deviation from the normal

The temporal arteries were large, distended, tortuous, nodular, and tender, the inflammation being more pronounced on the right side Meanwhile, the patient continued to lose weight, depending on aspirin and codeine for control of pain He was started on therapy with dexamethasone on June 3 1959, with dramatic results Forty-eight hours after the 1st dose the patient was symptom free and has stayed asymptomatic to the time of writing The temporal vessels are no longer visible, and he has gained 20 lb (9 1 kg) in body weight He has continued on a maintenance dose of 0 25 mg of dexamethasone, three times daily

Comment

It is obvious that in the mosaic of reports accumulated during the last quarter of a century relative to otorhinological affections of vascular origin there is much valuable information, although the overlapping, the conflicts of opinion, confusing terminology, and the rapid obsolescence of certain techniques and appreciations are apparent

All patients with "temporal arteritis" have headache It usually begins as a generalized headache, which may simulate any of the well-established syndromes and neuralgic patterns known to all otolaryngologists By involvement of the middle meningeal arteries, it simulates the excruciating retro-ocular and periglobar pain of inflammatory or tumoral processes of the sphenoid and the nasopharynx Otalgias and other ear symptoms, such as tinnitus, vertigo, and sudden deafness, simulating those found in temporomandibular joint derangement and the *migraine otique* of Escat, become evident upon involvement of the arteries leading to the ear, or else by transient cerebral ischemia

Later, when the temporal arteries are affected, frontal or temporal headaches become severe, and, when the occipital arteries are involved, pain in the neck and up the back of the head is a prominent symptom Headaches of greater severity are often associated with involvement of a fresh artery

Inflammation of the internal carotid and the vertebral arteries can result in extensive brain injury or assume the appearance of a number of conditions, such as cerebral tumor, cerebral vascular accidents, retinal artery thrombosis, sudden deafness, and ocular involvement ranging from diplopia to complete blindness [3]

Facial neuralgias accompanying this disease are not much different from the so-called atypical neuralgias so often blamed on sinusitis, and are the subject of a varied and rather confusing terminology beginning with the sphenopalatine ganglion syndrome and ending in the different so-called variants of the migraine symptom-complex Secondary or atypical forms of trigeminal neuralgias are encountered practically every day in the practice of otorhinolaryngology

The clinical patterns describing the different neuralgias show some of the so-called characteristics in common, to wit the tendency for the pain to occur with clockwork regularity at about exactly the same time and frequently at night, and the temporary relief afforded by digital compression of the carotid and temporal arteries

I believe that the most common form of neuralgia of the head among patients past the age of 60 years who suffer from temporal arteritis is analogous to the sphenopalatine neuralgia and suggests primary involvement of other branches of the external carotid artery, notably the external and internal maxillary artery [4]

In summarizing from consideration of the varied symptoms presented, it is clear that temporal arteritis can simulate a number of intracranial and otorhinolaryngological conditions or may aggravate those already present It is a well-founded suspicion that the otorhinolaryngological symptoms are a part of the syndrome of temporal arteritis among

patients of the 6th and 7th decade of life, with a history of throbbing cranial pain, low-grade fever, general malaise weakness, anorexia, loss of weight, and a high erythrocyte sedimentation rate

A knowledge of all the factors is essential in diagnosing the neuralgia and evaluating the importance of the presence or absence of sinus or ear pathology I would also like to emphasize the importance of studying the patient in his entirety, particularly when, as is the case in this condition, there is a problem of differential diagnosis

It is in relationship to diffuse vascular diseases that difficulties in diagnosis arise Since the disease constitutes a medical emergency, and since the continuously shifting angiitis gives this syndrome a protean nature characterized by the successive occurrence of exacerbations and remissions capable of producing irreparable damage to the visual apparatus and other vital structures, no time must be lost in instituting proper treatment with the corticosteroids as soon as the diagnosis of temporal arteritis is suspected [5]

The use of corticosteroids will control temporal arteritis as long as it endures, besides giving the much-needed symptomatic relief Relapses may occur in some instances, when the daily dose of the steroid is lower than the optimum maintenance dose [6]

Pta de Tierra St (27)

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Danger in the Use of Intrathecal Methylene Blue

Joseph P Evans, M D, and Harold R Keegan, M D, Chicago

Methylene blue has been used for some years to reveal the presence of block within the ventricular system Information gained from the procedure has been considered valuable, the drug harmless Reactions were considered anaphylactic in type Experimental observations emphasize, however, that the untoward effects are akin to phenomena resulting from the intrathecal administration of alcohol The dye becomes fixed to neural tissue and the subsequent course is irreversible Efforts to drain and irrigate the spinal subarachnoid space have failed to control or relieve the process In patients there is bilateral optical atrophy, anosmia, and quadriplegia, the lower extremities become flaccid and paralyzed Dementia has been noted

WE have been unable to determine when and by whom the suggestion was first made that methylene blue be introduced into the cerebral ventricles for the purpose of coloring the ventricular fluid to facilitate the detection of block within the ventricular system To our knowledge, however, the dye has been so used and without the recognition of deleterious effects for at least 30 years Nor have we been able to determine when it was first suggested that the dye might be introduced into the lumbar subarachnoid space so as to color the fluid and aid in the detection of the site of cerebrospinal leak, for example in instances of rhinorrhea Quite clearly, however, this has been an extrapolation based upon the apparent harmlessness of its intraventricular use

Review of Literature and Tabulation of Clinical Experience

The first adverse report in the literature so far as we know was that of Brihaye and Lorthior [1] In

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their patient, severe, persistent cauda equina dysfunction developed a few hours after the injection of methylene blue into the lumbar subarachnoid space This was interpreted as an allergic reaction, and they concluded their paper as follows

'Ought one then to counsel against its use? We think not, despite the tragic consequences which occurred The extreme rarity of such accidents in view of the widespread use of methylene blue does not justify so severe a condemnation Nevertheless, so far as we are concerned, we shall be careful in the future to test for intolerance before employing the dye'

The evidence we shall present justifies, in our opinion, an interdict on the use of the dye and does not sustain the assumption of Brihaye and Lorthioir that the neural deficit was due to an allergic reaction

Our own interest in this problem was stimulated by the development, in one of our own cases, of moderately severe cauda equina dysfunction, which, fortunately, gradually cleared almost completely This followed the introduction into the lumbar subarachnoid space of 1 cc of 1% aqueous methylene blue diluted in 23 cc of cerebrospinal fluid, the dye being used in the hope of detecting the site of a spontaneous cerebrospinal fluid rhinorrhea

This unfortunate occurrence led us to circularize a questionnaire among some 100 colleagues and to write to the Editor of THE JOURNAL a word of warning against the intrathecal use of Methylene Blue

Meantime there has appeared the report of Arieff and Pyzik[3] detailing the development of "an ascending paraplegia with evidence of peripheral nerve root and spinal cord involvement" The report continues The spinal fluid showed evidence of inflammatory reaction with marked elevation of protein level The patient gradually developed cerebral signs which necessitated decompression with a Holter tube At the time of this writing she has bilateral optic atrophy, anosmia, and quadriplegia The lower extremities were severely paralyzed and flaccid"

Because of the remarkable similarity of the 14 cases we have collected from our own experience and from the answers (including that of Arieff and Pyzik) to our questionnaire, the unfortunate sequelae are being presented in tabular form It will be noted, however, that there has been a good deal of variation in the severity of dysfunction Presumably these differences are dependent upon the amount of dye used, its concentration, and possibly to some extent, its rate of injection We are grateful to our colleagues who have reported to us their cases and given permission for their inclusion in this warning In some instances (Case 7, for example) information is scanty, but the reality of the occurrence is indubitable The collected experience gathered from our colleagues by direct inquiry and by questionnaire demonstrates that isolated instances have not provoked general alarm, nevertheless, when gathered as a group, the cases clearly confirm the danger

Cerebrospinal Fluid Reactions

The data concerning spinal fluid changes are limited to three cases, but there is some similarity in response in the three instances

In Case 4, there were reported on the day after injection 360 white blood cells The number of red blood cells was not reported The total protein content was 1,360 mg per 100 cc A cisternal fluid examined six weeks later revealed a protein content to be 10 mg per 100 cc

In Case 9, a lumbar puncture at five days revealed a clear fluid containing 16 white blood cells, all lymphocytes except for one polymorphonuclear cell The total protein content was 192 mg per 100 cc The next day, myelography revealed no evidence of arachnoiditis A ventricular specimen obtained at two months showed 1 white blood cell and a protein content of 7 mg per 100 cc

The fluid of Case 14 was examined at 10 days, at which time it was pink, contained 19 lymphocytes, 1,525 red blood cells, and had a protein content of 82 mg per cc At 15 days no white blood cells were seen, there were 933 red blood cells, and the total protein determination had risen to 171 mg per 100 cc At 21 days 1 white blood cell was found, the protein content was 172 mg per 100 cc At 53 days the protein was 66 mg per 100 cc, and at 43, 49, and 70 days, only 2 white blood cells were found The Pandy reaction at 70 days was 4+

Experimental Observations

In the effort to determine the nature of the pathological process involved in the clinical cases, methylene blue has been injected into the subarachnoid space of dogs Because of the relative difficulty of lumbar puncture in the dog, the cisternal route was used The animals were anesthetized with pentobarbital (Nembutal) and, under sterile conditions, 0 25 cc of 1% aqueous methylene blue mixed in 5 cc of spinal fluid was injected Three animals were used

The first animal, 7 8 kg (17 2 lb) in weight, did well for 10 minutes after injection Irregularities of respiration then developed, and soon the animal ceased breathing On gross examination of the brain and spinal cord carried out 48 hours after the death of the animal, deep staining of the cord and of the under surface of the brain was found The staining was most intense in the cisternal region On cross section of the cord the dye was found to have stained the neural structures intensely, the intensity diminishing toward the central portion of the cord Much of this staining may have occurred in the 48 hours preceding autopsy Microscopic study revealed no cellular, fiber, or meningeal abnormalities

The second animal, mature and 12.9 kg (28.4 lb.) in weight, was found on recovering from the anesthesia to have paralysis of the hind limbs with moderate weakness of the forelimbs. By the second day after the injection the weakness of the forelimbs had progressed to the point where the animal was nearly quadriplegic. The weakness continued to extend, and on the fourth day the animal died.

Autopsy was carried out six hours after death. Again there was found intense staining of the neural tissues. On microscopic examination of the cord there was surprisingly little evidence of meningeal reaction. The chief disturbance seemed to be a peripheral necrosis of the fiber elements of the cord, accompanied by swelling of the involved nerve fibers, and the appearance of vacuole formation in the peripheral white substance. The gray substance appeared unaffected.

The third animal, 7.8 kg (17.2 lb.) in weight and a puppy at the time of injection, developed tachypnea 15 minutes after injection, but this subsided spontaneously. Following recovery from anesthesia there was evident a severe weakness of both hind legs, but the strength in the forelimbs seemed little affected despite the fact that the injection was made into the cisterna magna.

This dog has shown gradual recession of his paresis, and at two months there is only a scarcely detectable weakness of the hind legs. On gross examination bladder and bowel function was never abnormal. Though the tail was initially paralyzed, it has completely recovered its strength.

Danger in the Use of Intrathecally Administered Methylene Blue as Exhibited by Fourteen Cases

Case No.	Reason for Injection	Site of Injection Amount Used, Dilution Factor (If Known)	Early Signs and Symptoms	Outcome
1	CSF* Rhinorrhea	Lumbar	Violent pain in lower extremities which gradually ascended to arms accompanied by marked loss of power and sensation, particularly in the distribution of the lumbosacral nerve roots	Improved but never fully recovered
2	Not stated	Lumbar	Numbness in lumbar and sacral area	Recovered (no report of sequelae)
3	Not stated	Lumbar	Meningeal signs	Recovered (no report of sequelae)
4	CSF Rhinorrhea	Lumbar 1 cc	Numbness in limbs followed by bilateral facial weakness, nasal speech, difficulty in swallowing, weakness in the arms and intercostal muscles and marked weakness of the legs with sacral anesthesia, bilateral Babinski and patulent anus	Four months later: Facial weakness, strength in arms and difficulty in breathing improved. Paraplegia continued and sensory level was stationary at T 5-6
5	CSF Rhinorrhea	Lumbar	Severe pain in back, weakness of all muscle groups up to and including the sternocleido mastoid muscles	Three months later: Diffuse weakness in limbs (estimated to be 10-15% reduction in strength of arms and 40-50% reduction in legs), atonic bladder, relaxed anal sphincter, impotence
6	CSF Rhinorrhea	Lumbar, 1 cc	Pain in the legs followed by difficulty in urinating. Complete paraplegia in 1 hour with sensory level at T 11	Strength in legs normal, sacral hypalgesia with difficulty voiding, impotence
7	Not stated	Lumbar	Paraplegia	Paraplegia
8	CSF Rhinorrhea	Lumbar (amount of dye described as "small amount")	Vomiting, headache, weakness of legs, unable to void	Paraplegia with sensory level T 10. Died 6 years later from other cause. No autopsy
9	CSF Rhinorrhea	Not stated	Quadriparesis, encephalopathy, optic neuritis	Paraplegia, mental changes, evidence of arachnoiditis
10	CSF Rhinorrhea	A. Lumbar, 2 cc of dye. B. Lumbar, 2 cc of dye (5 days after 1st injection)	Pain in back, urinary retention, headache, lethargy (attributed to antecedent meningitis), abdominal and leg pains, numbness in legs and buttocks, incontinent of feces, lethargic, some weakness of legs	Six years later: Continued perianal and perineal hypalgesia (S 3, S 4, S 5 dermatomes). No other detectable neurological deficit
11	CSF Rhinorrhea	A. Lumbar, 1 cc of dye. B. Lumbar, 1 cc of dye "Mixed with CSF," but dilution not recorded (2 mo. after 1st injection)	Pain in back and equivocal weakness of legs. Weakness of legs (more marked on right)	No residuals or late sequelae
12	CSF Rhinorrhea	Lumbar, 2 cc of dye	Pain in buttocks and posterior thighs. Weakness of legs. Some nuchal rigidity. Limited straight leg raising bilaterally	Last report 13 months postinjection. Strength of right leg slightly reduced, no sensory changes but reported to be troubled with muscular spasms of legs
13	CSF Rhinorrhea	Lumbar, 1 cc dye mixed with 23 cc CSF injected over course of 8 min	Severe back pain, paresis of both legs, sacral anesthesia, urinary retention, incontinent of feces	Minimal weakness of legs, some perianal hypalgesia, obstipation, occasional fecal incontinence
14	CSF Rhinorrhea	Lumbar, 10 cc	Pain in back, nausea, headache, numbness, tingling and weakness of legs progressing to sensory level in upper thoracic area and flaccid paralysis of muscles to that level. Urinary retention, incontinent of feces	Persistent paraplegia after 9 years, incontinent of urine and feces

*Cerebrospinal fluid.

Comment

From the data that have been presented, both clinical and experimental, it is evident that methylene blue is a highly dangerous substance when introduced into the subarachnoid space and that its use in this fashion must be flatly interdicted.

The fact that methylene blue has been used in the treatment of poisoning affecting oxygen transport "as a 1 per cent sterile solution, injected intravenously over a 5-minute period in dosage of 0.2 cc per kilogram"[4] would make it appear to be a relatively benign agent.

Its long use in coloring the fluid of cerebral ventricles dilated by aqueductal obstruction, in order to determine whether fluid passage to the fourth ventricle has been reestablished, has further lulled physicians and surgeons alike into a false sense of security For, although we have found no instance of deleterious effects following intraventricular use, it is possible that harmful effects have been concealed by the concomitant craniotomy In any event it is, in retrospect, clearly erroneous to assume that intravenous and intraventricular routes of administration are comparable to the intrathecal route

In the latter instance dye in much greater concentration is introduced into a very restricted space where susceptible neural elements are directly exposed to the caustic action of the agent, an agent whose pH range is from 3 6 to 3 7 It is our belief that the substance used in this fashion has an action akin to that produced by the intrathecal administration of absolute alcohol That the dye soon becomes fixed to neural tissue would seem clearly indicated by the fact that though an effort was made within a few hours in Case 5 to remove the dye, irreparable harm had occurred Further in Case 6, after an indeterminate time but presumably on the same day, under general anesthesia all available spinal fluid was removed and the spinal canal was irrigated with 800 cc of isotonic sodium chloride solution Again, the damage was irreversible

We fail to explain satisfactorily why it is that the agent when introduced into the cisterna magna of dogs, though causing respiratory arrest in one animal, affected the hind limbs more seriously than the forelimbs in the two surviving dogs In the human being it is clear, however, from the evidence available, that the dye is promptly diffused in the cerebrospinal fluid leading to involvement of cranial nerves and, later, to obstruction of cerebrospinal fluid pathways

We do not concur in the opinion expressed by Brihaye and Lorthioir[1] that this reaction is of anaphylactic character They imply that the reaction occurs infrequently but adduce no evidence to confirm this assumption Two of our correspondents have intimated that they have used the substance without catastrophe On the other hand, those who have reported accidents are emphatic in their rejection of intrathecally administered methylene blue Finally, our observations of animals clearly sustain the suggested interdict

A correspondent[2] raised the question following the publication of our letter of whether the accident might be comparable to those occasionally reported after administration of spinal anesthesia when the agent itself was thought to have been contaminated by the solution in which the ampules have been kept Such, however was not the explanation in the case we reported

Summary

Although 1% aqueous methylene blue has been much used intravenously in the treatment of methemoglobinemia without deleterious effect and although it has been injected into the dilated ventricles associated with cerebrospinal fluid block without *obvious* catastrophe, its introduction into the lumbar subarachnoid space is dangerous Fourteen cases have been tabulated in which neurological deficits of varying degree, ranging from mild paraparesis through quadriplegia, multiple cranial nerve involvement, obstructive hydrocephalus, and dementia have been observed following its intrathecal use Once injected, the dye appears to become fixed to neural tissue Sporadic efforts to drain and to irrigate the spinal subarachnoid spaces have not ameliorated the situation Experimental observations upon the dye's action have been made in dogs, and the gross and microscopic changes are described Clearly the use in patients of 1% aqueous methylene blue intrathecally is to be interdicted

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STATE MEDICAL SOCIETIES —The Revolution delayed the formation of state medical societies similar to the New Jersey group of 1766 But within a decade after the end of hostilities such bodies were organized in five other states and by 1815 nearly all states possessed them The immediate goals of medical societies were to set better-qualified practitioners apart from others by licensing provisions and to seek harmony within the superior guild by personal contacts and by a voluntary regulation of competition The need for some degree of harmony, if a real profession was to be established was apparent to certain leaders in the 1760s and became painfully obvious by the nineties —R H Shryock, Medicine and Society in America, 1660 1860 New York University Press 1960, page 31

Genetic, Metabolic, and Clinical Study on One Hundred Cerebral Palsied Patients

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THE increasing awareness and recognition of the importance of the genetic component in human disease and the need for greater understanding of the causation of cerebral palsy from a genetic and metabolic aspect encouraged this study Hereditary factors which cause or predispose to human disease must always be kept in mind when disorders of prenatal origin are under consideration Malformations may be symptoms resulting from different genetic mechanisms or from prenatal disturbances such as malnutrition, infections, metabolic, physiological or chemical disturbances, blood flow interruptions, hemorrhage, irradiation, and anoxia This list includes most of the known prenatal factors responsible for cerebral palsy [1]

TABLE 1 —*Classification, Distribution, and Blood Groups of Various Types of Cerebral Palsy in 100 Cases*

	Blood Group				Sex		
	A	O	B	AB	M	F	Total
Spasticity	20	18	7	3	29	19	48
Quadriplegia	8	10	1		13	6	19
Double hemiplegia	1	1				2	2
Diplegia	9	4	3		10	6	16
Paraplegia	1	3	3	1	4	4	8
Hemiplegia				1	1		1
Triplegia	1			1	1	1	2
Dyskinesia	20	19	5	1	25	20	45
Athetosis	17	18	3	1	24	15	39
Rigidity	3	1	2		1	5	6
Mixed	5	2			4	3	7
Total	45	39	12	4	58	42	100

Patients and Methods

Most of the 100 cerebral palsied patients forming the basis of this report were from the Moody State School for Cerebral Palsied Children The only children accepted at the school are those between the ages of 5 and 12 who are educable, can profit from the intensive program, and have opportunity for follow-up treatment The rest include a few private patients and some staff patients treated at John Sealy Hospital through the State Crippled Children's program The patients are fairly heterogeneous with respect to race and geographical and socioeconomic distribution

Every child was examined clinically over a period of months or years by Drs Margaret Watkins and Evans, Evans and Eggers, or all three A careful history was obtained from the parents, whenever possible, by examination of medical records and by corroborative evidence from other sources

Complete genotyping was done on all patients to determine the possibility of an association between blood groups and some types of cerebral palsy In addition, in some families with a suspected genetic etiology, complete genotyping was done on the entire family

Filter paper electrophoresis was employed to determine hemoglobin varieties and possible serum abnormalities in the blood of the patients and, in some cases, of members of their families Partition paper chromatography was also employed to determine whether some types of cerebral palsy are due to an inborn error of metabolism that might be demonstrated in the body fluids of the affected individuals

Results

Table 1 reveals that 58 male and 42 female patients compose this group of 100 cerebral palsied

The genetic component must be considered as one of the mechanisms responsible for some types of cerebral palsy Fifty of the 100 cases here reviewed were of prenatal origin Eleven cases had a "developmental" etiology and 32 were due to prematurity In the perinatal group 24 cases were due to anoxia These etiological factors are the least understood, and the present investigation indicates that some genetic mechanism is involved It was found that the sex ratio of the normal siblings was one whereas in the cerebral palsied group there was an excess of boys Primogeniture was not considered a predisposing factor in cerebral palsy Incomplete pregnancies, ranging from one to five per family, were present in 30 families The distribution of blood groups among the 100 patients gave an excess of group A above the expected number

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patients Of these, 79 were white Americans, 47 male and 32 female, 11 Mexicans, seven male and four female, and 10 Negroes, 4 male and 6 female In addition, there were 45 patients with group A blood, 39 with group O, 12 with group B, and four with group AB According to blood-group distribution in the general population, in this study, groups A and O are reversed The small number of patients investigated does not justify the assumption that more type A individuals are afflicted with cerebral palsy, however, should this trend continue, some interesting speculations are possible The blood-group distribution in relation to the various clinical types is also given in table 1 Blood group genotypes are tabulated in table 2 There were 89 Rh+ and 11 Rh— individuals All of the patients with Rh— blood were in the white population, five with group A and three each with groups O and B blood

Distribution according to etiology and clinical classification is presented in table 3 Tables 1 and 3 show that there were 48 patients with spasticity, 29 male and 19 female, 45 with dyskinesia, 25 male and 20 female, and 7 with mixed involvement, 4 male and 3 female Different criteria of clinical diagnosis and etiological classification among the various studies make comparison of results difficult In addition, the method of selection of cases at the Moody State School automatically eliminates the severely mentally and physically affected child and also the mildly affected individual

Fifty of the 100 cases were of prenatal origin Of these, 31 patients had spasticity, 17 had dyskinesia, and 2 were classified as mixed Forty-three patients had a history of paranatal factors and here 15 had spasticity, 25 had dyskinesia, and 3 had a mixed type of involvement Of the seven cases in which postnatal factors were responsible for the condition, two patients had spasticity, three had dyskinesia, and two were mixed Of the 50 cases due to prenatal factors, 11 were due to developmental factors and 32 to prematurity The rest of the cases in this group could be attributed to a more specific etiology In the paranatal group of 43 patients, the

TABLE 2 —*Genotypes of 100 Cerebral Palsied Children*

						Blood Type by Sex									
						A		O		B		AB			
	C	D	E	c	e	M	F	M	F	M	F	M	F	Total	Approximate Average %
CDe/cDe	+	+		+	+	11	7	8	4	1	2	1		34	33 0
CDe/cde															
CDe/CDe	+	+			+	4	3	4	3	1				19	17 0
cde/cde				+	+	2	3	1	2	2	1			11	14 0
cDE/cDe		+	+	+	+	4		4	2			1	1	12	12 0
cDE/cde															
CDe/cDF	+	+	+	+	+	4	4	5	1	2	1		1	18	12 0
cDe/cDe		+		+	+	1			2	1				4	7 0
cDe/cde															
cDE/cDE		+	+	+						1				1	2 0
CDF/cdE	+	+	+	+					1					1	<0 5
cDF/CdE															
Totals						26	19	22	17	8	4	2	2	100	
						45		39		12		4			
Approximate average %						42		44		10		4			

TABLE 3 —*Etiological Factors in Various Types of Cerebral Palsy*

	Spasticity							Dyskinesia				Total No of Cases
	Quadriplegia	Double Hemiplegia	Diplegia	Paraplegia	Hemiplegia	Triplegia	Total	Athetosis	Rigidity	Total	Mixed	
Prenatal												
Developmental	4			2			6	3	1	4	1	11
Prematurity	9	2	9	3			23	8	1	9		32
Rh incompatibility								4		4	1	5
Viral infections of mother	1		1				2					2
Total	14	2	10	5			31	15	2	17	2	50
Paranatal												
Anoxia	2		1				3	19	1	20	1	24
Birth trauma	2		2	2		1	7	2	2	4	2	13
Anoxemia	1						1					1
Intracranial hemorrhage			2		1	1	4					4
Jaundice								1		1		1
Total	5		5	2	1	2	15	22	3	25	3	43
Postnatal			1	1			2	2	1	3	2	7
Total	19	2	16	8	1	2	48	39	6	45	7	100

Hemoglobin S was demonstrated in a Negro girl and a Negro boy In another Negro girl hemoglobin C was demonstrated No other so called abnormal hemoglobin types were demonstrated In terms of what at the present time is considered normal, no serum abnormalities were detected by the electrophoretic method employed

largest number, 24 cases, was due to anoxia Thus, over one-half of the patients were in the developmental, prematurity, and anoxia categories This figure is particularly challenging, since these etiological factors are the least understood and our investigation is concerned primarily with patients in whom the cerebral palsied condition might be due to some genetic mechanism

TABLE 4 —*Birth Rank of Cerebral Palsied Children in Ninety-six Families*

Size of Sibship	No of Families	No of Normal Children		No of Affected Children		Birth Rank of Affected Children						
		Male	Female	Male	Female	1	2	3	4	5	6	9
1	11			6	5	11						
2	35	17	18	17	18	21	14					
3	21	21	21	16	5	7	8	6				
4	12	22	14	6	6	2	7	1	2			
5	9	15	21	4	5	4	3		1	1		
6	4	9	11	4				1	1	1	1	
7	1	4	2	1				1				
10	1	3	6	1								1
11	1	6	4		1							1
12	1	5	6	1								1
Total	96	102	103	56	40	45	32	9	4	2	1	3

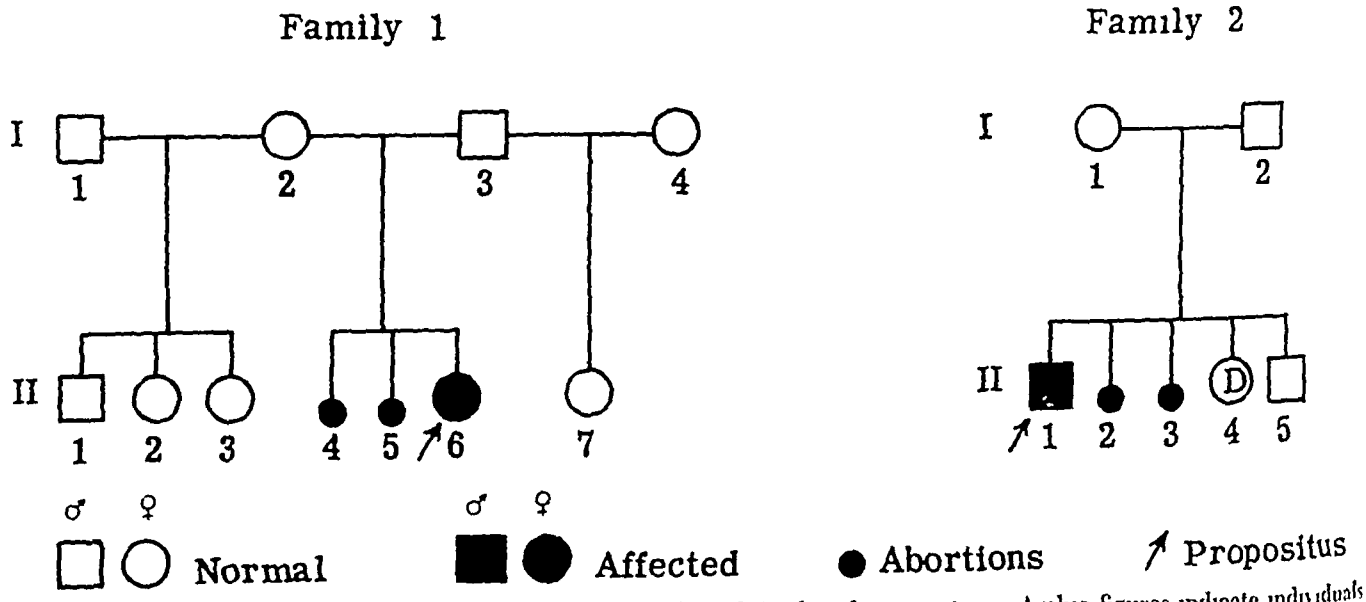
Comment

The relationship of prematurity and cerebral palsy was recognized by Little[2] in 1861 and is still one of the most common factors related to cerebral palsy Prematurity based on birth weight of 2,500 Gm or less, which in this series also coincides with a history of a shorter than normal gestation period, was present in 32 per cent of the cases This is in agreement with reports by other investigators[3] Eastman and DeLeon[4] and Polani[5] have adequately discussed the current thinking along these lines and no further discussion will be attempted at this time

The birth rank of the affected children in 96 families is tabulated in table 4 Three of the children in this study were adopted, and information necessary for inclusion was lacking In one family it was impossible to determine parentage correctly Of the four children omitted, two were boys and two were girls Primogeniture has been found common in cerebral palsied patients by other investigators[6] Perlstein[7] contended that it is one of the predisposing factors in cerebral palsy Conversely, Greenspan and Deaver[8] concluded that it is not a predisposing factor Although primogeniture accounts for 45 of the 96 cases, table 4 reveals that with increase in size of sibship, this assumption is no longer valid In order to obtain accurate results, the 11 families with one child should be omitted, and although the ratio is three to two in favor of the first-born in the families with two children, where there is an equal chance to be first-born or second-born, the number of families is too small to be significant

It is interesting to note that the sex ratio of the normal siblings is equal, 102 boys and 103 girls, whereas in the cerebral palsied group there is an excess of boys Unequal sex distribution is consistent with previous reports on this condition Gustafson and Garceau[9] reported 108 male and 77 female subjects in their group of 185 cases Fifty seven per cent of the cases studied by Asher and Schonell[3a] and Anderson[10] were boys In 96 patients, ranging in age from 1 to 12, Herlitz and Redin[11] had 51 boys and 45 girls The higher incidence of cerebral palsy in the male population might be explained by the sex-linked type of inheritance demonstrated for some types of cerebral palsy[12]

Another observation of interest and noted by many investigators[13] is the number of incomplete pregnancies in families with cerebral palsied children Histories of incomplete pregnancies have been noted by Denhoff and Holden[14] in 28 per cent of their cases Hopkins and co-workers[15] found miscarriages or stillbirths in approximately 24 per cent of their cases In our series, 30 per cent of the



Pedigrees of two patients with cerebral palsy Roman numerals at left identify generations, Arabic figures indicate individuals

families had a history of abortions ranging from one to five per family Situations frequently encountered with regard to histories of abortions are demonstrated in the figure The pedigree of family 1 shows that both of the parents have remarried and have normal children with their respective spouses In family 1 the mother, I-2, of the propositus has three normal children, a boy II-1, and two girls II-2 and II-3, with her present husband, I-1, the father, I-3, has a normal girl, II-7, with his present wife, I 4 Yet there were two abortions, II-4 and II-5, prior to the birth of the propositus, II-6 In addition, personal interviews revealed that the patient had been a threatened abortion in the first four months of pregnancy and that the physician kept the mother in bed and gave her shots in order to bring this pregnancy to term The patient, a girl, was delivered on Aug 30, 1949, after a full-term pregnancy and a ten-hour labor Birth weight was 8 lb (3,600 Gm) The mother was 17 years old and the father 25 years old at the time of the child's birth There was no ABO or Rh blood-group incompatibility The patient and father are type O Rh— and the mother is type O Rh+ and thus heterozygous for the Rh factor The mother s present husband is also Rh+ The cerebral palsied condition of the patient was detected at age 6 months She has spastic quadriplegia of the developmental type

Another example on the chart is family 2 Here the propositus, II-1, is a boy born prematurely on Dec 1, 1946 At the time of birth the mother was 21 years old and the father 22 Subsequent to the patient's birth there were two abortions, II-2 and II-3, and then a girl, II-4, was born on Feb 14, 1953 The cause of this child's death in 1955 was leukemia The youngest sibling in this family II-5, was born Nov 6, 1955 The patient and the father have type A Rh+ blood The condition of the child was detected at age 1 year clinical diagnosis, athetosis (tension), etiology, prematurity

Illustrations of other case histories in this study might be more dramatic, however, the two examples presented on the chart may be considered typical situations encountered in any study on cerebral palsy Some genetic incompatibility between I-2 and I-3 seems to be operating in family 1 and probably, to a lesser degree, between the parents in family 2 It must be kept in mind that, in addition to gene mutations, differences in chromosomal constitution, especially in chromosome number, must be considered as mechanisms responsible for the phenotypic expression of certain clinical entities In an effort to elucidate such a mechanism peripheral leukocytes, grown in tissue culture, from all of the cerebral palsied children with a developmental etiology are being checked for abnormal chromosomes

Summary

A genetic, metabolic, and clinical study on 100 cerebral palsied patients, 58 male and 42 female, showed general agreement with other studies Forty-eight patients had spasticity, 45 had dyskinesia, and 7 had mixed involvement Blood groups were distributed as follows 45 group A, 39 group O 12 group B, and 4 group AB Of these 89 were Rh+ and 11 Rh— No serum or hemoglobin abnormalities were demonstrated by the paper electrophoretic method employed

The most impressive etiological factors were prematurity, 32 per cent, anoxia, 24 per cent, birth trauma, 13 per cent, and developmental factors, 11 per cent Seven per cent of the cases were due to postnatal factors A history of abortions, ranging from one to five per family, was demonstrated in 30 per cent of the families

Dr Margaret Watkins, Dallas, Texas, Miss Robertine St James and the staff of Moody State School, and the Orthopedic Residents at John Sealy Hospital Galveston cooperated in this investigation

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Epidemic Poliomyelitis, Des Moines, Iowa, 1959

Preliminary Report

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In 1959 a severe epidemic of type 1 poliomyelitis occurred in Des Moines and the surrounding area of Polk County, Iowa Of the 178 cases reported between May 1 and Oct 31, 74 were paralytic and 104 were nonparalytic The epidemic was characterized by an early seasonal onset, with the highest incidence among unvaccinated preschool children of low income families The attack rate of the lower socioeconomic group was eight times higher than that of the upper socio economic group The incidence of para lytic poliomyelitis was considerably lower in persons who had received three or more injections of Salk vaccine com pared with that of the unvaccinated group

DURING the summer of 1959, the city of Des Moines and the surrounding area of Polk County, Iowa, experienced a severe epidemic of poliomyelitis This epidemic showed many features similar to those observed in the 1956 Chicago outbreak[1] and the 1958 Detroit outbreak[2] The Des Moines epidemic was characterized by an unusually early seasonal onset, a high incidence in the Negro population, an inverse relationship of incidence to socioeconomic status, and a predominance of cases in the preschool age group

The factors which have brought about this change in the pattern of epidemic poliomyelitis, although they are undoubtedly related in some way to the mass use of Salk vaccine, are still incompletely known Complete understanding of these factors is likely to be gained not from study of a single epidemic, but from comparison of many Detailed analyses of epidemiologic and laboratory data collected during the Des Moines epidemic will be published in a later paper[3] However, a preliminary report which describes the broad outlines of the epidemic seems appropriate at this time

Materials and Methods

Polk County, Iowa, had an estimated population of 253,200 in 1959 Most of this population is concentrated in the city of Des Moines and in the immediately surrounding suburban areas The 1959 population of the city was estimated as 203,300, which excludes a large suburban area annexed in 1957, because of uncertainty about its population

Poliomyelitis morbidity rates for past years are known accurately for the city of Des Moines only, since the Health Department was expanded to serve the entire county less than 10 years ago Since 1939, the annual incidence of reported poliomyelitis ranged from 1 0 per 100,000 (1957) to 165 8 per 100,000 (1952), with the median being 28 2

Studies of case reports in previous epidemic years show seasonal curves beginning in July, with peaks occurring in either August or September There was an even scattering of cases geographically, with no relationship to socioeconomic status

In 1959, special epidemiological investigation was initiated on June 12 after the reporting of 15 cases of poliomyelitis in Des Moines, of which 10 were paralytic and 2 were fatal Clinical and epidemio logical data were collected by a team of investi gators consisting of personnel from the Des Moines Health Department, the Iowa State Department of Health, and the Communicable Disease Center

Reports of communicable disease came to the city health department from the eight hospitals in the area An epidemiologist visited the hospitals daily to record new cases of poliomyelitis, to abstract

Director, Des Moines Polk County Health Department (Dr Speers) Assistant Chief (Dr Chin) and Epidemic Intelligence Service Officer (Dr Marine), Kansas City Field Station, Epidemiology Branch Communicable Disease Center, Statistician, Epidemiology Branch, Communicable Disease Center (Mr Hall), and Virologist, Kansas City Field Station, Epidemiology Branch Communicable Disease Center (Mr Gravelle)

clinical records, and to supervise the collection of specimens to be sent to the U S Public Health Service virus laboratory in Kansas City, Kan Further epidemiological data were obtained by a nurse who interviewed the patient or a responsible member of his family

An attempt was made to collect fecal specimens, throat washings, and paired blood specimens from each reported case Feces and throat washings were tested in monkey kidney-tissue cultures Paired sera were tested for presence of complement fixing (CF) antibodies against poliovirus types 1, 2, and 3

Muscle evaluation was performed in each case (both paralytic and nonparalytic) by a physiatrist or physical therapist about 60 days after onset of illness

Epidemiology

A total of 181 cases was reported in Polk County during 1959, 178 occurred during the epidemic period between May 1 and Oct 31 Of these 178 patients, 134 lived within the Des Moines city limits, 32 in the suburban fringe area, and 12 in rural Polk County The over-all incidence for Polk County was 71 5 per 100,000 population This is the third highest rate ever recorded, and is exceeded only by that of the epidemics in 1952 and in 1954

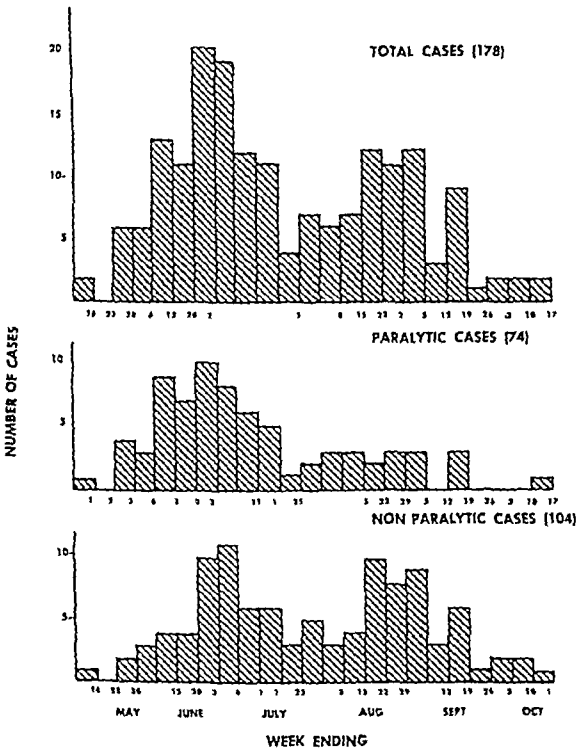

Fig 1 —Reported cases of poliomyelitis, Polk County, Iowa, by date of onset and paralytic status on admission, May 1 to Oct 31, 1959

The cases reported, by date of onset and paralytic status on admission, are shown in Figure 1 There is a definite bi-modal distribution of the total cases, with peaks in June and August During the first 11 weeks of the epidemic, over 50 per cent of the cases were reported as paralytic Thereafter, less than 30 per cent of the cases were paralytic

TABLE 1 —Incidence of Poliomyelitis by Socioeconomic Classification and Paralytic Status*

Des Moines, 1959

Socioeconomic Group	Estimated Population	Paralytic		Nonparalytic		Both Types	
		No Cases	Rate per 100 000	No Cases	Rate per 100 000	No Cases	Rate per 100 000
Upper	64 300	2	3 1	9	14 0	11	17 1
Middle	102 800	30	29 2	43	41 8	73	71 0
Lower†	36 000	21	58 0	29	80 1	50	138 1
All Groups	203 300	53	26 1	81	39 8	134	65 9

*Reported cases by hospital admission diagnosis
†Includes both white and non white

Geographically, the 1959 cases were concentrated in a relatively small area in the center of the city, which is known to be low on the socioeconomic scale and includes a large proportion of the city's Negro population This tendency toward concentration of cases was most marked at the beginning of the epidemic, with a more scattered distribution of later cases

The attack rates by socioeconomic and paralytic status are shown in Table 1 The rates were highest in the lower economic group, the over-all rate being eight times higher than that in the upper economic group The paralytic attack rates between the upper and lower economic groups showed nearly a twenty-fold difference

A large proportion of the early cases occurred among the Negroes The Negro population of Des Moines is estimated at 10,300, the white population at 193,000 As shown in Figure 2, the cases in Negroes were limited to the first portion of the epidemic When the incidence is compared by race, in Table 2, both paralytic and nonparalytic attack rates for the Negroes were six times higher than for the whites

Figure 3 shows the percentage distribution, by age, of cases in whites and Negroes Among white patients 40 7 per cent were under the age of 5, with the largest number of cases occurring at age 2, 39 4 per cent of the Negro patients were in the 5- to 9-year age group, with the largest number of cases occurring at age 5

When the incidence is expressed by age-specific attack rates, the highest rate was in the 0- to 4-year group (Table 3) In previous epidemic years (1952 and 1954), the highest age-specific rate had been in the 5- to 9-year age group The incidence among the Negro population in 1959, however, was equally high in both the 0- to 4- and 5- to 9-year groups

Laboratory Studies —Feces or throat washings, or both, were obtained from 170 of the 181 patients in Polk County Poliovirus type 1 was recovered from 86 patients, of whom 63 had paralytic and 23 non-

paralytic disease Types 2 and 3 poliovirus were not found Specimens from 11 nonparalytic cases yielded either an ECHO or a Coxsackie virus Paired sera from six paralytic and six nonparalytic cases showed a fourfold or greater change in CF antibody titer against type-1 poliovirus A fourfold

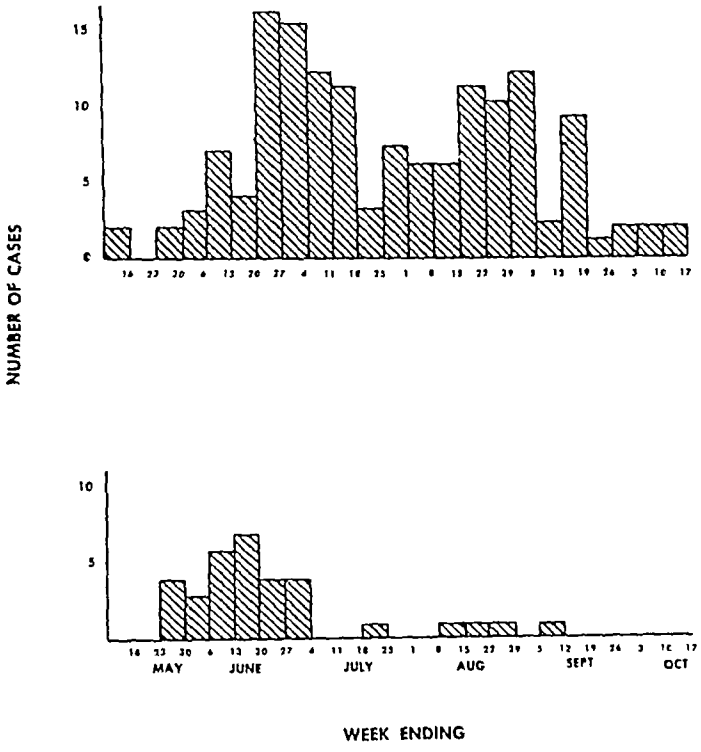

Fig 2 —Reported cases of poliomyelitis, Polk County, Iowa, by race and date of onset, May 1 to Oct 31, 1959 *Top*, 145 cases in white persons, *bottom*, 33 cases in Negroes

change in CF antibody titer against type-3 poliovirus was demonstrated in four additional nonparalytic cases

On the basis of virus isolation and antibody study, infection due to poliovirus type 1 was shown in 98 patients, and probable infection related to type-3 poliovirus was found in four patients Infection associated with either an ECHO or a Coxsackie virus was demonstrated in 11 patients, all of whom became ill after Aug 1 These data indicate that the first half of the epidemic was caused by poliovirus, while the second half was caused by both poliovirus and other enteroviruses

TABLE 2 —Incidence of Poliomyelitis by Race and Paralytic Status*
Des Moines, 1959

Race	Estimated Population	Paralytic		Nonparalytic		Both Types	
		No Cases	Rate per 100 000	No Cases	Rate per 100 000	No Cases	Rate per 100 000
Caucasian	193,000	39	20 2	62	32 1	101	52 3
Negro	10 300	14	13 9	19	184	33	320 4
Total	203,300	53	26 1	81	39 8	134	65 9

*Reported cases by hospital admission diagnosis

Control Measures—News coverage of the early stages of the epidemic carried more than the usual emotional impact Two of the four deaths which occurred during the epidemic were reported almost simultaneously early in the epidemic period These resulted in a sharp increase in the demand for vaccination, affecting both public and private sources

The Health Department immunization clinic, which was ordinarily operated one morning a week, was expanded to full-time operation, including evening hours Many private physicians also made special arrangements to provide vaccination for their patients

After one week of this expanded program, a sample of the immunization records at the Health Department clinic was analyzed by place of residence In the light of our knowledge of income levels and other pertinent factors, attendance was felt to be adequate, with one surprising exception—the central area, which was then experiencing the largest number of cases A special clinic was opened at a settlement house in this area In addition, volunteers were recruited and trained by the local chapter of the National Foundation to carry on a door-to-door educational campaign Each family in the area was visited, the dates and times of the clinic were explained, and all were encouraged to obtain necessary vaccinations In all, this clinic vaccinated over 3,000 persons It was felt that many of these would not otherwise have sought vaccination The clinic was therefore continued until late in the epidemic period, even though the cost per injection

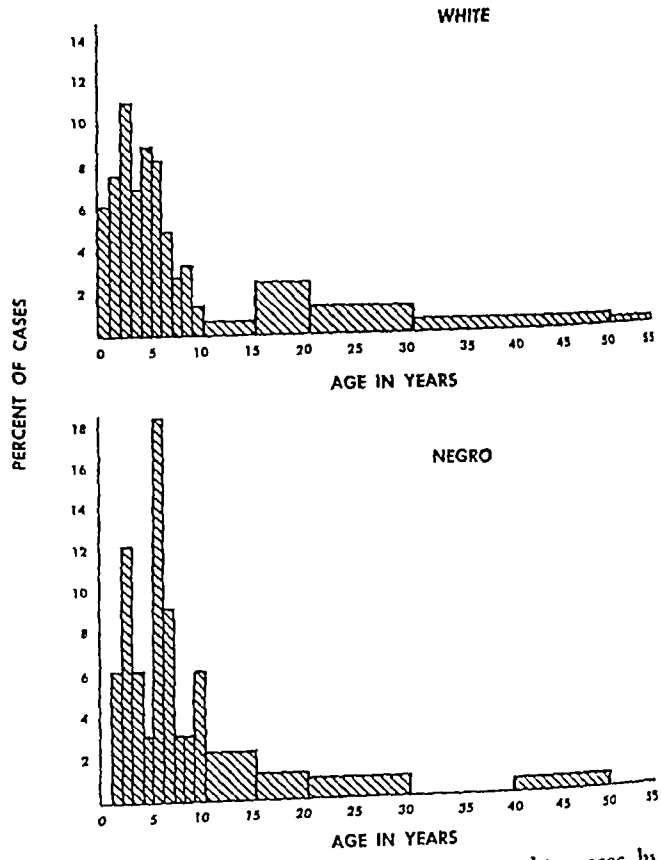

Fig 3 —Percentage distribution of poliomyelitis cases, by age and race, Des Moines, Iowa, 1959

was considerably greater than in other public clinics

During the epidemic period, over 50,000 injections were given in clinics operated by the Health Department A telephone survey indicated that at least twice this number were given by private physicians

Studies on Vaccine

Vaccination Status—In mid-July, after the majority of vaccinations had been given, a vaccination survey was conducted, according to the method described in the 'Manual for Conducting an Immunization Survey in an Urban Area" A random sample of 678 households, including 2,324 persons, was interviewed Data were obtained as to poliomyelitis vaccinations status on June 1, before concentrated immunization efforts had begun, and on July 16, the time of the survey

make possible an estimate of vaccine effectiveness against paralytic poliomyelitis (Table 4) Estimated populations by vaccination status were determined in each age group, according to proportions found in the survey sample on June 1 All paralytic cases, on the basis of admission diagnosis, were tabulated according to vaccination status at the date of onset, with all injections given up to two weeks prior to this date included The calculation does not, therefore, take into account the change in the vaccination status of the population after June 1 If this

TABLE 3 —Age specific Attack Rates of Poliomyelitis by Race Des Moines 1959

Age Group Yr	Caucasian			Negro			Total		
	Estimated Population	No Cases	Rate per 100 000	Estimated Population	No Cases	Rate per 100 000	Estimated Population	No Cases	Rate per 100 000
0-4	18 400	4	24 6	1 600	9	600 0	19 000	54	271 4
5-9	18 300	23	125 7	1 800	1	122 2	20 100	36	179 1
10-14	14 700	5	34 0	1 300	4	307 7	16 000	9	56 2
15-19	13 600	15	110 3	700	2	285 7	14 400	17	118 0
20-39	59 400	10	16 8	2 200	3	136 4	61 600	13	21 1
40 and above	68 000		4 4	2 800	2	71 4	71 400	5	7 0
Total	193 000	101	52 3	10 300	31	300 4	203 300	154	75 9

During this seven-week period it would, of course, have been impossible for anyone to have obtained the complete series of immunizations The effectiveness of the immunization program, therefore, can best be judged by the number of previously unvaccinated persons who obtained their first vaccination

Before the epidemic, there was a definite socioeconomic and racial gradient in the proportion of unvaccinated persons in all age groups, with the upper-income white group showing the highest level of vaccinations and the Negro group the lowest A similar gradient existed among persons who had received three or more injections, with the percentage vaccinated ranging from two to five times higher in the upper-income white group than in the Negro group

At the time of the survey the difference in the percentage unvaccinated had been in great part eliminated Because of the short time involved, there was little change in the relationship of the triply vaccinated, although some improvement did occur

Also of interest in evaluating the results of the vaccination program during the epidemic is the number of persons who received fourth injections during the period studied On June 1, it is estimated that 49,600 persons had received three injections of vaccine but had not had a fourth During the seven-week survey period, 35,100 (71 per cent) of these persons received the fourth injection The percentage of quadruply vaccinated individuals increased from 9 per cent to 26 per cent in the total population, and from 18 per cent to 50 per cent in the population under age 20

Vaccine Effectiveness—When correlated with epidemiological data from the cases that occurred within the city, the results of the vaccination survey

could have been done, the calculated effectiveness would be increased by virtue of the fact that the population group with three and four injections was increasing during this period

Although subject to some inaccuracy and bias,[1] as a result of the methods of calculation used and the small number of cases involved, the magnitude of the differences found is sufficiently great to indicate that adequate immunization, with three or more injections of vaccine, remains a highly effective procedure A more detailed analysis of the effect of the Salk-type vaccine in reducing paralytic poliomyelitis in various socioeconomic groups will be described by Chin and co-workers [5]

TABLE 4 —Estimated Effectiveness of Poliomyelitis Vaccine by Age and Number of Injections, Des Moines—1959

No of Injections	Estimated Population	No of Paralytic Cases	Rate per 100 000	% Effectiveness
	Age 0-14			
None	30 600	25	216 0	
1 or 2	9 800	3	31 8	85 3
3	24 900	5	20 0	90 7
4 or more	10 500	1	9 5	95 6
	Age 15-39			
None	35 000	9	25 7	
1 or 2	13 400	2	14 9	42 0
3	20 800	2	9 6	62 6
4 or more	6 100	0	0 0	100 0

All injections given up to two weeks prior to onset were included in the vaccination status of each case

Further evidence of protective effect of the vaccine may be derived from a study of the severity of residual paralysis The relationship of the muscle evaluation and the vaccination status of the 179 cases completed to date is shown in Table 5 (This includes several cases occurring during the epidemic period, on which delayed reports were received after Oct 31) Vaccination with three or more doses of vaccine not only reduced the proportion of paralytic cases among those attacked but also

appears to have effected a reduction in severity of residual paralysis Of the 70 patients who had received less than three injections of vaccine, only 11 (16 per cent) had minor residual involvement In contrast, 7 (41 per cent) of 17 patients with three or more injections of vaccine had minor involvement Although the number of patients in the well-vaccinated group is relatively small, the proportion of patients with minor residual muscle involvement appears to be greater than that of the group who had not been adequately vaccinated ($\chi^2=4.02$, $p=0.05$)

TABLE 5 —Paralytic Status Sixty Days or More After Onset, by Number of Injections of Poliomyelitis Vaccine, Des Moines—1959

	No of Cases				
No of Injections	Complete Recovery	Minor Involvement*	Significant Paralysis	Severe Paralysis	Death
None	26	7	20	23	2
1 or 2	1[illegible]	4	8	5	1
3	2[illegible]	4	4	1	1
4 or more	26	3	3	1	0

* Minor involvement indicates muscle weakness without significant functional impairment

Comment

Analysis of the epidemic of poliomyelitis which occurred in Des Moines and Polk County, Iowa, during the summer of 1959 reveals a close similarity to the pattern which has been reported from other areas since the Salk vaccine became generally available In contrast with the pattern of poliomyelitis epidemics of previous years, the 1959 cases were concentrated in the lower socioeconomic groups and in Negroes The age distribution of the cases shifted rather markedly toward the younger age groups, particularly those under 5 years of age

A study of vaccination status made during the epidemic showed that these high-incidence groups were not as well vaccinated as others in the population Data on reported cases indicate that an adequate course of Salk vaccine (three or more injections) confers a high degree of protection It seems probable, however, from experience in this and other recent epidemics, that the mass use of the vaccine at the time of the epidemic does little to alter the course of the epidemic

Effective control of poliomyelitis will be achieved only when the vaccinated portion of the population approaches 100 per cent of susceptible individuals It is the responsibility of the medical and public-health professions to work toward this goal Its achievement will require more than mere identification of the unvaccinated groups, although this is the necessary first step We must also determine the factors responsible for failure of these groups to obtain vaccination, whether they be psychological, economic, educational, or otherwise, and take the necessary steps to correct them

Summary

An epidemic of poliomyelitis occurred in Des Moines and the surrounding area of Polk County, Iowa, during the summer of 1959 A total of 178 cases were reported during the epidemic period between May 1 and Oct 31 The epidemic had an unusually early seasonal onset, with the peak incidence appearing in late June Maximum attack rates were in Negro and lower-income white children of preschool age There was a definite concentration of the cases in the center of the city

Analysis of the vaccination data indicates that the Salk-type vaccine has continued to be highly effective in reducing the incidence of paralytic poliomyelitis Intensification of the vaccination program after the epidemic had begun, however, did not seem to alter the course of the epidemic

3900 Eaton (3) (Dr Chin)

James Z Bowcock, M D, Fred E Tosh, M D, and Virginia Himes, R N, of the Communicable Disease Center participated in this study Muscle evaluation was performed by William D De Gravelle, M D, and Marlin B Ewing, M D, Blank Memorial Hospital, and Elizabeth Kraetsch, R N, City Health Department, Des Moines, Iowa

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POLIOMYELITIS EPIDEMIC—1916 —Further opportunity for outstanding public service came to Dr (Henry Leber) Coit during the severe poliomyelitis epidemic in 1916 Although sixty-two years old at the time, he worked untiringly to help care for the victims of infantile paralysis He organized the Citizens' Relief Committee and collected thousands of dollars to help defray the expense of prolonged patient care He secured a physiotherapist from Boston to train eight Newark nurses in the massage and muscle-training technics so vital in rehabilitating victims of the disease —F B Rogers Help-Bringers Versatile Physicians of New Jersey New York, Vantage Press, 1960

Treatment of Edema with an Orally Administered Spirolactone

Ira N Tublin, M D, and Leonard B Berman, M D, Washington, D C

An orally administered aldosterone antagonist has been evaluated for usefulness as a diuretic Sixteen patients with edema due to cirrhosis, nephrotic syndromes, congestive heart failure, and acute glomerulonephritis received the drug a total of 21 times Weight loss of more than two pounds daily was noted over a 48-hour period in seven trials Weight reduction of less than two pounds occurred in six trials, and no significant loss in eight No single diagnostic category responded more favorably than the others Evidence of inhibition of aldosterone effects in the renal tubule was obtained in all patients, regardless of the weight response No toxic manifestations were observed

THE exact role of aldosterone in the formation of edema fluid continues to be a topic of considerable interest [1] The well-known paradox of increased urinary aldosterone levels *without* edema [2] in primary aldosteronism, and increased levels *with* edema in various diseases of the heart, liver, and kidneys has received some clarification in the work of Nelson and August [3,4] These investigators were unable to produce edema in normal subjects who were given aldosterone because of an 'escape" from its salt-retaining effects after the accumulation of only 2 to 3 kg of additional weight In edematous subjects, on the other hand, administration of aldosterone was accompanied by continued accumulation of salt and water Such studies have given rise to the concept of aldosterone as a permissive agent in edema formation, i e, unable to initiate the accumulation of edema fluid, but necessary for its formation in the circulatory disturbances which attend various disease states

The possibility of treating edema by the suppression or antagonism of aldosterone was, therefore, a natural one to arise Suppression of aldosterone production had been accomplished sometime earlier with amphenone,[5] but this compound proved too toxic for use and was abandoned More recently, a series of synthetic steroids,[6] the spirolactones, were developed by Kagawa and his co-workers [7] which inhibited the renal tubular effects of aldosterone without interfering with its production and release by the adrenal cortex [8] Further investigations [9] demonstrated that the spirolactones had no effect on renal blood flow and glomerular filtration rate in normal subjects, but acted instead at the level of the renal tubule to reverse the effects of aldosterone, i e, to promote the excretion of sodium, chloride and water, and to decrease the excretion of potassium hydrogen, ammonium, and phosphate These aldosterone antagonists were inactive in situations characterized by little or no aldosterone secretion, e g, high sodium intake or adrenalectomy

A series of clinical papers followed [10-12] describing the effects of a parenterally administered spirolactone (SC 8109) on small numbers of edematous patients These preliminary results were quite variable, ranging from no significant weight loss to an occasionally striking diuresis It was frequently noted that sodium excretion increased even when no weight loss had occurred, and several authors commented on the advantages of a diuretic which did not increase potassium excretion

Experience with the newer, orally administered spirolactone [SC 9420, 3(3-OXO-7 α acetylthio-17 βhydrox-4 androsten-17 α yl) propionic γ-lactone] has, as yet, been quite meager,[13-16] and for the most part confined to patients with cirrhosis Clowdus and associates [17] noted the greatest effect when the drug was combined with other diuretics The present report is an account of our experience with this drug in the management of 16 patients with edema of various origins We have been specifically interested in the immediate (48-hour) effects of the orally administered spirolactone without combination with other diuretics

Fellow (Dr Tublin) Kidney Laboratory Veteran s Administration Hospital work performed during tenure of a traineeship from the National Heart Institute National Institutes of Health Director (Dr Berman) Kidney Laboratory Veteran s Administration Hospital and the Children s hospital of the District of Columbia

Materials and Methods

The 16 patients used in this study were selected from the medical wards of the Veterans Administration Hospital and the Children's Hospital in Washington, D C The sole criterion for admission to the study was the presence of edema The patients ranged in age from 4 to 67 years Diagnoses included the nephrotic syndrome (six), congestive heart failure (five), cirrhosis with ascites (two), acute glomerulonephritis (two), and edema of unknown etiology (one) All but three patients were placed on a diet containing less than 50 mEq of sodium per day, digitalis was used in the congestive failure group when indicated, and two patients who were receiving chlorothiazide therapy before entering the study continued to receive it All patients were weighed daily

the table It should be noted that four patients received more than one course (B M, P F, S T and W K) Thus, 21 courses of drug administration were observed Patients listed are divided into three groups on the basis of their response to the spiro lactone therapy as discussed further

Results

Using changes in body weight as the criterio response to the therapy, the patients have bee vided as follows group 1, no weight loss (trials), group 2, weight loss of less than two pc per day (six trials), and group 3, weight loss of than two pounds per day (seven trials)

The seven patients in group 3 respon daily weight losses of 2 2 to 4 8 pounds, ave (1 00 to 2 18 kg, average 1 41) It is of interes

Clinical Data and Response to Spirolactone Therapy in Sixteen Patients with Edema, Twenty-one Courses of Ther

Patient	Age, Yrs	Diagnosis	Course of Therapy	Dose Mg /Kg /Day	Dose Schedule
		Group 1—No Weight Loss			
B M	43	Cirrhosis with ascites	1	7 4	500 for 1 dose
			2	15 2	250 every 6 hours fo
R C	41	Cirrhosis with ascites	3	14 8	250 every 6 hours
B C	6	Nephrotic syndrome	4	22 0	500 for 1 dose
P F	25	Nephrotic syndrome	5	16 2	250 every 6 hours
R Y	8	Nephrotic syndrome	6	11 6	500 for 1 dose
S T	62	Congestive heart failure	7	9 2	500 for 1 dose
B G	4	Acute glomerulonephritis	8	18 4	500 for 1 dose
		Group 2—<2 pounds/day			
R K	11	Nephrotic syndrome	9	7 7	500 for 1 dose
A J	16	Nephrotic syndrome	10	7 1	500 for 1 dose
S T	62	Congestive heart failure	11	17 9	250 every 6 hour
W K	63	Congestive heart failure	12	7 3	500 for 1 dose
			13	13 7	250 every 6 hour
J M	67	Congestive heart failure	14	25 0	500 every 6 hour
		Group 3—>2 pounds/day			
J F	42	Nephrotic syndrome	15	14 2	250 every 6 hour
P F	21	Nephrotic syndrome	16	10 1	150 every 6 hour
C L	6	Acute glomerulonephritis	17	27 4	500 for 1 dose
C B	61	Congestive heart failure	18	37 3	500 every 6 hou
W K	63	Congestive heart failure renal insufficiency	19	13 6	250 every 6 hour
			20	27 7	500 every 6 ho
J M	63	Congestive heart failure	21	31 4	500 every 6 hour
W D	61	Edema of unknown etiology			

The study began with a measurement of 24 excretion rates for urine water, sodium, potassium, and chloride levels Serum concentrations of sodium, potassium, chloride, and urea nitrogen levels were also measured on the control day Spirolactone therapy was begun on the next day in orally given doses which varied in amount from 7 to 37 mg per kilogram of body weight per 24 hours, and varied in schedule from single doses to administration every six hours for a 48-hour period Twenty-four hour measurements were made of urine levels on the first and second day of therapy as on the control day Serum electrolytes and blood urea nitrogen measurements were repeated after therapy Standard laboratory methods for electrolyte and urea nitrogen determinations were used Clinical details and dosage schedules are given in

a favorable response was obtained in patients with nephrotic syndrome, two tients with congestive failures, neither of cirrhosis, and one of two with acute nephritis Thus, no single diagnostic categ onstrated a predilection toward a favo sponse All patients in all groups experien in sodium and chloride excretion with tone and a variable rise or fall in potass tion The rise in urinary sodium conc of proportion to any increase in urine sulted necessarily in a decrease of free ance It should be emphasized that the observed among the three groups were rather than qualitative The mean ration of urinary sodium to potassi nificantly during treatment from 0

groups 1 and 2, and 2 3 to 3 9 in group 3, thus suggesting some inhibition of the renal tubule aldosterone effects, even in the absence of a diuresis factors such as age and diagnosis seemed to have little bearing on the response to treatment It is striking that the administered dose was significantly larger in group 3 than in groups 1 and 2 ($p < 05$), and that all doses in group 3 exceeded the manufacturer s recommended dosage of 400 mg per day The mean doses were 14 4 mg per kilogram of body weight per day in group 1 13 6 in group 2, and 23 1 in group 3 No toxic manifestations were noted in any patient in this series Serum electrolyte concentrations were normal in all but two instances of hyponatremia and one of hypokalemia and did not change during the study Similarly, six patients with mild azotemia (blood urea nitrogen level, 20 to 40 mg per 100 ml) showed no change after treatment Of the four patients receiving two or more courses of therapy, two (P F, W K) exhibited a variation in response as shown in the table

Comment

The data suggest that some inhibition of aldosterone in the renal tubule occurred in all 16 edematous patients receiving the spirolactone This was characterized by a rise in urinary sodium to potassium concentration ratios The increased ratio was accomplished by a naturesis and chlorresis without a corresponding kaliuresis Although this is of physiological interest, the quantitative aspects are of somewhat more importance to the clinician In only 7 of 21 trials did a weight loss of two pounds or greater per day occur, and these were modest in magnitude The failure to obtain a diuresis even in the presence of aldosterone inhibition emphasizes the many facets of edema formation that remain obscure It is possible that a longer period of administration might have yielded a greater number of responsive patients and a greater magnitude of weight loss, but a latent period of several days[17] would constitute somewhat of a limitation on the clinical usefulness of spirolactone when used alone The question of combining it with other diuretics has received some attention, but the published literature is not yet large enough to provide clarification In our own experience, two patients refractory to chlorothiazide therapy were also refractory to chlorothiazide plus spirolactone therapy Nevertheless, if the drug is to gain a place in the treatment of edematous patients, it seems probably that it will be in those patients who are refractory to commonly employed diuretics

Summary

16 patients with edema of various origins, an orally administered spirolactone produced a weight loss of more than two pounds per day in 7 of 21 trials Evidence of aldosterone inhibition was obtained in all 16 patients No toxic manifestations were observed

The spirolactone was supplied as Aldactone for this study by G D Searle & Company, Chicago

Veterans Administration Hospital (Dr Berman)

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Fig 4 —Patient 3, with bright red strawberry mark 1 cm in size, present at birth and rapidly developing in a month's time Hyperplastic and hypertrophic changes of a dark blue color beneath the primary bright red spot Radiation sensitive

Fig 5 —Patient 4, *top*, showing extensive rapidly growing strawberry mark, with areas of lesion elevated 3 to 4 mm Note involvement over the epiphyses Lesion radiation sensitive and treated with ultrasoft x-rays *Bottom*, appearance two years later after ultrasoft x-ray (Grenz) therapy No epiphyseal damage and complete involution

appear for a period ranging from a week up to three months She consults her clinician, and he tells her the lesion will disappear and not to be alarmed about it One month later, the size of the lesion has increased to 4 to 6 cm It has become elevated (1 cm), dome shaped, and red in color on the crest of the dome, with a dusky dark blue color at the base that is sometimes only faintly visible During this time lapse an excellent opportunity for therapy has been lost This is frequently the sequence of events in the common behavior of the third and largest group of angiomas, namely the strawberry mark (nevus vasculosus, immature angioma) He-

mangioma simplex[2] and cavernous angioma[2,4] are two designations which should not be used to describe the strawberry mark or its deeper hyperplastic variations as they are confusing and contrary to pathologic findings These terms have been applied herein and elsewhere[3] to designate the port-wine stain and mature cavernous angioma

Strawberry marks may be hypertrophic and hyperplastic and many contain great numbers of dilated capillaries, a delicate tissue stroma, and solid cords of endothelial cells, with large nuclei and vacuoles and a tendency to canalization (Fig 5, 6 and 7)[1] These findings indicate an embryonal immaturity with poor cell differentiation, thus accounting for their now well-know radiation sensitivity As these lesions become chronologically older,[5] the cellular changes show more differentiation and less immaturity, they gradually lose much of their radiation sensitivity In a sense, they follow the example of keloids and granulation tissue, which are very radiation sensitive up to six months but scarcely at all radiation sensitive after one year when they have become mature adult scars, with few cell nuclei remaining in the highly differentiated fibrous tissue

We wish to emphasize the following points with reference to strawberry marks and hyperplastic angiomas All of the lesions are small or absent at birth and may grow to tremendous size Fifty per cent of them are present at birth[3] Another 35% appear during the first month postpartum Fifteen per cent occur after the first month All are extremely radiation sensitive at the time of their appearance and tend to lose much of this characteristic within 12 to 18 months A tendency toward spontaneous involution is present, with a better prognosis in those lesions which enlarge during the first few months of life[4,6] The prediction of the course and final outcome of any given angioma, without treatment, is impossible Partial or complete regression may occur in four to five years, with resultant wrinkles or a baggy appearance of the skin[4] Thirty-seven per cent of untreated lesions of superficial strawberry mark persisted after five years,[7] and 84% of hyperplastic angiomas persisted more than five years Ulceration occurs frequently (dry, small crusts or large, slow healing open ulcers) Frequently, after healing, there is scarring and cosmetic results are poor[1] Severe hemorrhage occurs occasionally, with one death reported by Winer in a patient with a large lesion[1] Infection, which occurs fairly frequently in cases with ulceration, produces permanent scarring Ulceration is more common and troublesome around the nostrils, eyelids, lips, ears, genitals, and anus[7] Although these tumors are commonly called cavernous angiomas[2] (probably because they can grow to great size), this term should be reserved for the true mature cavernous angioma

Therapy

In the past years, various types of physical therapy have been used, including therapy with solid carbon dioxide, electrocoagulation, sandpaper abrasion, surgery, sclerosing solutions, and tatooing with flesh-colored pigments For small lesions generally and in selected larger lesions, any of these methods or a combination of them might be employed advantageously The extensive literature concerning angiomas contains very ample discussions on the advantages and disadvantages of all of these methods, including another extensively employed and effective approach, namely, radiation therapy with x-rays or radium [7] With scarcely any dissenters, all dermatologists usually agree that results are excellent [8, 9] but that late sequelae may in some instances appear

Damage to epiphyses and deep soft tissue structures, skin damage, and radiation sequelae with ulceration have been recorded In addition, unnecessary fear and hysteria have been produced by both lay and scientific publications in the minds of the laity as well as in medical and allied fields by poor, inadequate, or sensational reporting If the aforementioned objections to use of ionizing radiation are valid, and if we agree that they are (even though instances of these sequelae are not common when compared with the vast number of angiomas treated), then newer forms of radiation which deposit the ionizing rays in the lesion rather than below it should be adopted and employed This is termed level therapy

With few exceptions, such as Gustave Bucky, Anthony Cipollaro, and others, dermatologists generally (until approximately 1950) have employed superficial" x-ray therapy of a hardness of radiation that permitted 50% of the dose to emerge on the inside of the cheek and 30 to 40% on the opposite side of the treated hand Obviously, this is excessive dosage for the majority of strawberry marks and hyperplastic angiomas

For the past 10 years we have been doing clinical

Fig 6 —Patient 5, *top*, showing extensive strawberry mark with superficial, hyperplastic and hypertrophic areas (actively growing lesion) sensitive to radiation Appeared after birth and rapidly grew to present size in five months time *Bottom*, follow up after combined therapy with ultrasoft (Grenz) radiation to superficial portions and conventional 'superficial" x ray therapy to deeper hyperplastic parts of growth

Fig 7 —Patient 6, 2½ years old, showing large hyperplastic and hypertrophic lesion, not present at birth Rash' developed on face within two weeks after birth, grew to this size in three months No involution in 2½ years Preventable if treated early with irradiation

investigations with two other forms of radiation which we shall call soft and ultrasoft The results of this work have been published [10] Table 1 indicates the depth dose and absorption dose of soft (beryllium window, no filter 0 1 HVL mm Al) and ultrasoft (Grenz-ray 03 HVL mm Al) radiation as compared to conventional "superficial" x-ray therapy

Newer equipment (with lower kilovoltages), beryllium window x-ray tubes, lower half-value layers, and softer long wavelengths, less penetrating x-rays and improvements in calibration instruments and technique provide irradiation of much greater safety than has been commonly used (Table) As a result of our experience in all types of dermatologi-

treated will permit its use without any hazard to underlying structures A more detailed and comprehensive discussion of these modalities has been published [10] It must be emphasized again that the best results of the therapy are obtained if treatment is begun as early as possible after the appearance of the angioma [5]

With respect to the mature port-wine stain which many authors dismiss by stating that they are best left alone,[11] we have been able to show very significant changes in selected cases in which the deeper plexuses are not involved extensively Before therapy, a biopsy to determine depth or test dose for sensitivity to radiation or both are done Although port-wine stains are histologically mature,

Radiation Qualities Used by Dermatologists

	50%* HV Dose in Tissue	90%* Absorption Dose in Tissue
Grenz Ray (03 HVL mm Al)	44 mm	1 7 mm
Beryllium Window (no filter) (0 1 HVL mm Al)	1 9 mm	9 6 mm
Conventional 100 kV—HVL 1 0 mm Al)	10 8 mm	43 2 mm

Grenz and Beryllium Window (unfiltered) radiation will produce as good a response in 80% or more of skin lesions as Conventional Radiation with less risk to normal tissues Conventional Radiation may be reserved for tumors (sensitive) granulomas (deep) Epilations, etc
* (Measured in "Tissue Like Wax by W A Jennings London)

lesions including more than 600 angiomas, we ve arranged a basic dosage schedule for therapy hich we consider safe with properly calibrated equipment

For use of Grenz rays (ultrasoft) with a quality of 03 HVL mm Al on angiomas of the superficial strawberry type (raised 3 to 4 cm above the skin), a dosage of 700 r is given monthly or bimonthly for five to seven treatments for a total dosage of 3,500 to 4,900 r (Fig 5) The dosage is reduced when definite improvement is noted Often this occurs one month after the first treatment, and therapy may be entirely discontinued after three or four treatments

For port-wine and mature cavernous angiomas, with few exceptions, therapy is not recommended except where partial involution only is considered to be a satisfactory result In selected cases of port-wine stain, treated early, 50% improvement may be obtained (see Fig 1 and 2)

For hyperplastic strawberry marks with deep dark blue underlying elements, up to 1 cm in depth the next deeper level is employed (table) These are x-rays produced at 50 kilovolts through a beryllium window which is unfiltered, the quality of the radiation corresponding to 0 1 HVL mm Al The initial dose is 600 r followed by a dose of 400 r one month later which may be repeated again in two months, with therapy discontinued as soon as definite regression is noted (Fig 4)

If the lesion exceeds 1 cm in depth requiring greater penetration of therapy, conventional "superficial" x-ray therapy may be used in combination with either soft or ultrasoft x-ray, if the area being

our observations indicate that they are radiation sensitive enough in early infancy to account for considerable improvement when treated with ultra soft x-rays in well-tolerated skin doses (Fig 1)

Patients with mature cavernous angiomas, because of the penetration to subcutaneous layers and mature nature of the lesion, are not suitable candidates for any type of radiation therapy (Fig 3) Plastic surgery is the only hope for partial or complete removal of these lesions Electrodesiccation of capillary nodules in the tumor may improve the situation measurably and permit the smooth application of a masking make-up (Fig 2)

Some strawberry marks, with various amount of hypertrophy and hyperplasia, tend to involute spontaneously after a period of growth of approximately six months [12] (requiring up to five years to involute), often leaving a residual flabby or baggy skin The "watchful waiting" type of management of these lesions is currently popular and is accepted by the attending physician much too dogmatically In some instances, this can lead to tragic results (Fig 7) No individual case (without therapy) can be predicted as to its outcome, because the growth of hyperplastic and hypertrophic strawberry angiomas does not follow any specific pattern Andrews [2] states that 84% of hypertrophic and hyperplastic angiomas and 37% of the more superficial strawberry marks persisted for more than five years

If modern radiation therapy, with its level therapy aspect, affords results free from sequelae and ionization does not reach the epiphyses or deeper structures, with the result that present day objections to x-ray therapy are overcome, it would

be very difficult to justify waiting for spontaneous involution of any angioma in this most common group I am confident that soft and ultrasoft x-ray therapy is effective in many cases of superficial strawberry and hyperplastic angiomas, with excellent cosmetic results and without danger of any serious sequelae

Summary and Conclusions

Mature angiomas are relatively radiation resistant Immature angiomas (the most common type) are radiation sensitive, much more so in the very early stages of their development Opportunities for excellent results are present in the first 5 to 10 days but dwindle as time goes on Radiation therapy is the simplest, least difficult, and least painful of the therapeutic measures and is generally agreed upon is being the most effective single approach The chief objection (late sequelae) can be entirely overcome with adequate equipment and training for the use of soft and ultrasoft irradiation Dosages for effective therapy are discussed Watchful waiting for spontaneous involution may lead to tragic circumstances which could have been prevented Statistical studies show widely divergent results and opinions with reference to spontaneous involution It is difficult to find a parallel situation in medicine today in which a valuable therapeutic measure is withheld in an active process just because this process in some instances is capable of spontaneous healing

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THERAPY WITH SIMPLES IN JAMESTOWN COLONY—Dr Bohun, finding very few medical supplies when he arrived [in the Colony at Jamestown in 1610], began to investigate the medicinal properties of plants native to Virginia Sassafras, a member of the laurel family is also called the "ague tree as a decoction of the bark and roots were supposed to have cured that disease The bark of the twigs and the pith were used in diseases of the eye and for dysentery Snake root (serpentaria) also known as snakeweed pelican-flower, sangrel, sangree root noted for the stimulant, diaphoretic and tonic values was advocated in the treatment of typhoid and digestive disorders Black snakeroot (Black Cohosh Cimicifuga Racemosa) was regarded by the Indians as a valuable medicinal plant Senna (Cassia Marylandica) was used widely as a purgative Rhubarb tobacco and sarsaparilla, wild cherry bark and ipecac (emetic) were enthusiastically advocated Golden Seal (Hydrastis Canadensis) [was used by] the Indians as a medicine, dye for clothing and stain for their faces Golden Seal is known by several names yellow root yellow puccoon orange root, Indian dye, wild curcuma Indian tumeric jaundice root eyebalm, eye root and ground raspberry The root was chewed for relief of sore mouth The juice was used as a diuretic stimulant and escharotic, the powder for blistering, and the infusion for dropsy The Jamestown weed or Jimson weed (Datura Stramonium) was used as a sedative and antispasmodic in larger doses, as a narcotic Tobacco was described to have healthful qualities 'which purgeth superfluous fleame and other grosse humors, openeth all the pores & passages of the body by which meanes the use thereof not only preserveth the body from obstructions, but also in short time breaketh them Smokers swore it was an antidote to all poisons Some doctors were of the opinion it would heal gout and the ague, neutralize the effects of drunkenness and remove weariness and hunger—M G Hawkins Epidemics and Therapy with Simples in the Early American Colony at Jamestown Virginia *Virginia Medical Monthly*, December 1959

SPECIAL CONTRIBUTION

The Professional Responsibility of the Physician

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Society sets the minimal standards of medical practice These are represented by state board examinations, by the few national and state laws that deal with certain aspects of medical practice and by the threat of criminal or civil action in instances of malpractice or overt disregard of law Fortunately, when these standards are compared with the actual level of medical practice, they are minimal indeed

One reason why the average performance of the physician exceeds society's minimal standards is that the medical profession has devised ways of setting and enforcing its own minimal standards—standards that are well above those required by society One way in which this has been accomplished has been the enforcement by hospital staffs and county and state medical associations of a certain standard of professional performance and ethical practice, many professional societies demand high qualifications Aside from a moral appeal, the principal source of power behind this system is the status and earning potential inherent in staff, association, or society membership A loss in membership threatens status and also earnings

Minimal versus Maximal Standard

In reality, then, the minimal standards with which medical practice must comply are set at two different levels the lower is set by society, the higher, by the profession But both are minimal, and neither is good enough It is fortunate that most physicians are not content to let their professional performance rest at either of these levels The degree of excellence over and above that prescribed by the minimal standards either of society or of the medical profession must be the resultant of the standards which each physician sets for himself, as determined by the strength of his own personal conviction

This type of conduct cannot result from any type of legislation It cannot be enforced, it cannot be controlled by man-made laws, rules, or regulations But if it is not subject to man-made law, it is subject to natural law This concept can be amplified in a rather roundabout way

For centuries man's attention has largely been concerned with his relationship to natural law, with ways of making use of it, of adjusting to it, or with ways of delaying its action Man has never been able to modify or abrogate natural law

Gravity is one law of nature that everyone recognizes The archway is one of the means man has found of resisting the law of gravity or of delaying its action We all know, however, that the archway cannot resist the law of gravity forever, and that some day the arch must fall Nature's law of gravity will win eventually

The natural law that is pertinent to this discussion is the "law of the isolation of the individual" This is the law that dictates that there will always be times when the individual human being must stand alone In dealing with this law, man's chief aim has been to devise ways of making a better adjustment to it, ways of delaying or softening its effect This effort has largely had to do with the use of the spoken and written word, with the development of the art of communication In the reading of the Holy Word or a discourse, in listening to a sermon, or in the counsel of a minister, lawyer doctor, or friend, one frequently finds direction and solace that help in dealing with this law It is here that spiritual values may come into play and add immeasurably to one's internal resources But be all this as it may, one can seek all the help and solace in the world, yet there still comes the time of personal isolation and personal decision—of facing up to situations in the solitude of one's own feelings, thoughts, and convictions The law of the isolation of the individual eventually comes into play with

full force There is nothing that anyone can say or do that will soften or delay its effect

It is from the background of this law that the personal conviction of the physician must emerge There are many times every day when the scientific and ethical decisions that are peculiar to the practice of medicine must be made in the solitude of one's own inner being

Education and Maximal Standard

While development of the ability to deal with the law of the isolation of the individual and to help others deal with it may be one of the objectives of medical education it must not be forgotten that the capacity for such development is dependent upon the intellectual and ethical potentials with which a person is born and which have been nurtured during early life This should serve to emphasize the important role which our medical schools must play if our men and women in medicine are to act as they should Our schools must select students who already have these potentials, also they must build and conduct their educational programs so that these potentials will have an opportunity to grow and mature But the extent to which inherited, environmental, and educational influences may combine to compel the physician to exceed minimal or standardized levels of practice barely acceptable to society or the profession can only become apparent as he goes through the trials by fire that follow graduation

Will the physician s striving for standards that can come only from personal conviction survive—or, better yet, be further reinforced by his response to—the stresses and strains imposed by professional responsibility? Not unless he has concepts of excellence that will permit him to distinguish between the implications of the words standard" and standardization '

The practice of medicine implies a highly individualized, highly personalized type of service Obviously, since no two individuals are alike, this service will vary according to the server s capacities, abilities, and ideals of quality After allowing for such variation, if each physician is to give his best, it is imperative that his work be measured against standards that are not limited by standardization The word standard' means a goal that is as high as the mind can conceive—it is the ideal The ideal goal may never be attained but, as a result of striving for it, the final accomplishment will be greater than could otherwise have been the case On the other hand, when the idea of standardization enters into the setting of goals, we immediately provide for limitations beyond which no one is encouraged to go Standardization itself becomes the goal and, since individuals vary in their capacity to achieve, the standard is brought down to the level of those who can achieve the least, and the incentive for variation in the direction of a better-than-average performance is at once removed

Standards of a Profession

The implications of the words "profession" and 'professional" can be closely related to this question of standard versus standardization The use of these words is no longer strictly in line with the definitions in our dictionaries Their popular usage contributes to the difficulties of definition because nearly every walk of life now proclaims itself to be professional Today these terms are by no means limited, as they used to be, to the learned professions of theology, law, and medicine In fact, in common usage these words are applied indiscriminately and often mean nothing more than the opposite of amateur '

The truly professional person is one who, by virtue of intellectual capacity, education, and moral outlook, is capable of the exercise of intelligence and judgment at a high level of responsibility In fact, the entire concept of the word 'professional' can be related to the word 'judgment' Judgment is an art, and the professional person should practice this art on the basis of broad knowledge, penetrating wisdom, and great moral certitude He cannot depend upon rules, regulations, and formulae for guidance in the formulation of his judgment

The true professional person is not just a technician The technician s task is to process data and information, not to interpret or evaluate them The professional person, on the other hand, is distinguished from the technician by his ability to judge the validity of data and information and to determine their significance in relation to an immediate problem at hand The professional person, by nature of these qualifications, should be able to deal effectively with any situation which confronts him, no matter how unusual, complicated, or unexpected As a professional, the physician must constantly deal with the unpredictable, because he is so frequently involved in problems that arise out of differences between people and the different ways in which these people react to a multitude of possible combinations of possible situations

The kind of judgment which the physician should exercise cannot be standardized and cannot be regulated by any authority outside himself Herein lies the ultimate responsibility of the physician We come right back to the original thesis of this article, for while society in general and the medical profession in particular may lay down codes, rules, regulations, and standards regarding the conduct of medical practice, the most effective and satisfying professional performance will depend upon standards that are far higher—standards which the individual physician sets for himself

It is a paradox that many of the influences which compete with this concept of the professional stand-

and come from progress—progress that has been taking place both in medicine and in the environment in which medicine must function This can be elaborated by discussing two sets of circumstances

First, the urbanization of our population and the development of good roads and rapid transportation have greatly reduced both the time and the distance that formerly stood between the physician and his patients Increasingly, specific and dramatic therapeutic measures are simplifying and shortening the management of many of the formerly long-term, time-consuming illnesses, and the physician's time has been freed for more patients Scientific and technical developments are resulting in innumerable instruments which have increased accuracy and efficiency Many of these can be applied to the patient by assistants or technicians, thus freeing the physician's time still further

In the administrative aspects of medicine, things have been happening which are also adding to efficiency and effectiveness The old days of making time-consuming calls from house to house are gone Use of the hospital has increased dramatically and this institution has developed as the headquarters for the diagnosis and treatment of many types of illness that formerly were handled in the doctor's office or in the patient's home The physician's time is thus conserved because he can amplify his services through the help of interns, residents, nurses, and technicians, and also because he can move rapidly from patient to patient Another development is the organization of health services by the business, industrial, and educational institutions of our country This type of service goes far in conserving the physician's time and energy through efficient organization of space, equipment, and personnel

Finally, specialty practice is emerging as a most important factor in increasing efficiency and effectiveness Scientific advances in medicine since the turn of the century have been such that the single individual cannot possibly be effective in the whole field, fragmentation, or the breaking up of medicine into learnable parts, has therefore been necessary And from the administrative standpoint, the organization of specialists into groups and clinics has helped to increase the efficiency of service

It can be said, therefore, that one of the important results of the trends that have just been enumerated is that the physician can now extend his time and energy to more patients than has ever been the case before This in part because he has more time to give, and in part because of the need for less time per patient

Now, as long as an increase in efficiency can go hand in hand with an increase in effectiveness, there can be no complaint But it must be recognized that there is a limit to which increased efficiency, at the expense of time per patient, can go without impairing effectiveness The application of time-saving developments may be reaching the point of diminishing returns, for a certain amount of time per patient is essential, if only to permit the physician to apply his scientific knowledge properly, and there are many who believe that in the hustle and bustle of modern practice we are frequently denying the patient even this kind of time

But assuming that the time per patient is just enough to satisfy proper scientific and technical consideration, this standing alone cannot suffice This is because, in spite of our scientific and administrative progress in the field of medicine, the actual therapeutic value of the inter-personal relationship between the physician and his patient will always stand as an indispensable tool, and if time limitation is allowed to cut down the effective use of this tool, we are led to overemphasize the diagnosis and treatment of disease as such and underemphasize the need for understanding and helping the person in whom disease may be present An approach to medicine that is weighted in favor of technological and administrative considerations becomes impersonal and mechanical and invites the development of assembly line methods and the standardization that goes with them, thus lessening the challenge to let the satisfaction of personal conviction dominate the development of professional standards

The medical profession may just now be recognizing what has been happening and the pendulum may be swinging the other way But, even so, it must be realized that technical and administrative progress in medicine will continue and the problems discussed here will always be something with which we must reckon

The second set of circumstances pertinent to the paradox under discussion comes largely from the turmoil taking place in and around medicine because of the impact between it and the society it serves Here again, the progress of medicine itself is at the core of the situation, for as medicine has broadened and deepened its science, and has thus increased in effectiveness, its indispensability to the structure and function of society has become irrevocably established In other words, medicine has become both scientific and social, and the merging of the two developments is creating problems both in medicine and in society It is not this turmoil as such but its possible effect on the individual standards of the physician that should be a source of concern

The formation of associations and societies has long been a standard part of America's social pattern, and in this regard professional people have been no exception Historically, professional people have banded together for the purpose of discussion, study, and mutual help so as to improve and increase the effectiveness of their science and their art However, as our democratic society has

developed, political power has more and more come to reside in groups that have either been organized specifically for political purposes or taken on political objectives over and above the original reasons for their organization Along with this, there has been an increasing tendency for professional groups to become common fronts' in the interests of their own political and economic protection as well as what they consider to be the protection of the public they serve

In any sizable group, however—particularly one of professional people supposedly educated to think and act for themselves—it is unreasonable to expect except in the most unusual circumstances, that there can ever be unanimity on any question of political or social importance Even though most of those representing the majority viewpoint may have come by their opinion honestly and intelligently, and even though many in the minority may have raised their separate voices in equally honest and intelligent disagreement, there will still be others who for various reasons—laziness ignorance apathy, fear of criticism, desire for approbation or too much business, to name only a few—either consciously conform to the will of the majority or, because they have no opinion at all seem so to conform When a professional person becomes a member of a group that is to concern itself with questions of social policy and action, he should realize that he is taking on a personal responsibility cluttered with pitfalls, if he fails to inform himself of the facts and to think and act accordingly if the facts have not been obtained and he fails to insist that they be sought, or if he conforms to the will of the majority against his inner judgment or because of failure to use his judgment, he is sacrificing that individual independence and integrity which is the essence of the true professional

Professional people will continue to join together in associations and societies and as such they will continue to deal with questions of social policy and action But as physicians face up to this kind of responsibility, they should resolve to apply the same standards of judgment as those which should pertain to purely scientific and professional questions Double but unequal standards are incompatible and always result in the lower setting the pace

This article may sound critical when it implies that society's minimal standards are low when compared with the level of conduct that the individual physician should set for himself This is not intended, for while these standards may seem low, society places no obstacle in the way of a superior performance In fact, historically, society has shown its confidence in the medical profession by according it the privilege of functioning with a minimum of legal regulation, implying that a performance above the level of the minimal standard is actually expected

With the effectiveness of medicine constantly increasing and with the responsibility of the physician increasing in proportion, society's expectation of health service will also increase The maximum potential of this increasing effectiveness and of discharging this increasing responsibility cannot be forced or regulated by man-made rules Thus the scientific and professional standards of medical practice, particularly those that can only be measured by the yardstick of personal conviction, must be held as high as is humanly possible

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THE EXAGGERATION OF TRUTH—This and other examples of uncompromising truth telling remind me of a story told me by the great Norwegian oceanographer, Hjort Hjort was on a fishing smack off the Norway coast, engaged in studies of fish migration Somewhat of an experienced sailor himself, he was disturbed by noticing that the old captain of the smack was inexcusably careless about writing the daily log On some days he neglected making any notations at all, composing a partially fictitious two or three days entry whenever it suited him Hjort reproached him for this, appealed to him on the basis of tradition professional ethics the honor of the seamen's calling It made no impression The old captain remained obdurate, said it was unimportant, insisted he didn't care a damn—nobody ever read a fisherman's log anyway etc etc Hjort kept on Finally, the ancient became irritated You are a professor he said I am a captain I have lived a long time and I have seen many things And I tell you, Professor,—and you can remember it,—the truth can be exaggerated, Professor The old mariner was quite right The truth can be exaggerated when the doctor talks to a hopeless patient There are no two cases alike Judgment tact, and compassion can be the only guides, and external circumstances must be taken into account In some cases, the cold truth may bring panic and serve no useful end whatever In other cases—those in which the patient accepts tranquilly the philosophy of Seneca *Stultum est timere quod vitari non potest*'—the certainty of impending death may clear the mind for the resigned tendernesses of the precious remaining days which lend dignity and gentleness to death itself—H Zinsser As I Remember Him The Biography of R S, Boston, Little, Brown and Company 1940

THE JOURNAL
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AN ESTEEMED PHYSICIAN, TEACHER, INVESTIGATOR, AND MEDICAL STATESMAN

ON Oct 9, 1960, the third T Duckett Jones Memorial Award was presented to Dr Rebecca C Lancefield in recognition of her long and continuing studies which are so largely responsible for present knowledge of the biology of hemolytic streptococci The presentation was made at The Princeton Inn, Princeton, N J, on the occasion of the third annual meeting of The Helen Hay Whitney Foundation Research Fellows and Established Investigators and the Foundation's Second Connective Tissue Conference The first T Duckett Jones Memorial Award was presented in 1958 to Dr Luis F Leloir, Director, Instituto de Investigaciones Bioquimicas, Fundacion Campomar, Buenos Aires, Argentina, in recognition of his work on the isolation of uridine diphosphoglucose and other derivatives of uridine from plant and animal tissues, which have been shown to be intimately involved in synthetic mechanisms in many forms of life The following year the award was made to Dr Karl Meyer, Department of Medicine, Columbia University College of Physicians and Surgeons, New York City, in recognition of pioneer and continuing work in the field of mucopolysaccharides

The T Duckett Jones Memorial Award, one of the largest medical awards in this country ($6500), is made possible by a fund established by Dr Jones' friends The annual income from this fund is matched each year by The Helen Hay Whitney Foundation, thereby making possible the perpetuation of the memory and philosophy of the Foundation's first Medical Director The Helen Hay Whitney Foundation was established in 1947 for the express purpose of stimulating and supporting research pertinent to the solution of the problem of rheumatic fever and rheumatic heart disease The work of the Foundation, in trying to advance the acquisition of knowledge concerning rheumatic fever, was closely woven into the fabric of Dr Jones' life, as was the welfare of those whom the Foundation has been privileged to aid Dr Jones' role in the study of rheumatic fever was so closely identified with the disease that, in the minds of many, the mention of his name immediately suggests the great struggle for the control of this disease Because Dr Jones' manifold activities and achievements stand as milestones in a life devoted to service, it seems fitting to acquaint the medical profession with his background and personality and his contribution to medicine

T Duckett Jones was born in Petersburg, Va, on Feb 2, 1899, a descendant of a colonial family long distinguished in medicine, the son of Jane Duckett and Dr John Bolling Jones His father was a physician, as are his brother and one sister, two other sisters have married physicians After graduation from the Virginia Military Institute, he entered the Medical School of the University of Virginia He received his medical degree in 1923 and remained on as intern and resident in medicine Subsequently he was a Dalton Fellow and resident in cardiology at the Massachusetts General Hospital Then he worked for a year abroad as a National Research Council Fellow under Sir Thomas Lewis at University College Hospital, London In 1928 he returned to Boston where he organized the clinics and the research department at the House of the Good Samaritan, which he directed from 1929 to 1947 During this period began an association with the Harvard Medical School which was to continue during his whole life Throughout this time he was also a member of the staff of the Massachusetts General Hospital, where he inaugurated and developed the rheumatic fever clinic In 1947 because of his eminence in the field of rheumatic fever, he was asked to become the Medical Director of the newly established Helen Hay Whitney Foundation, a position he held until his death Dr Jones stood for many things, and will be remembered as a rare human being, a physician, teacher, investigator and medical statesman

As Physician this he was first and foremost Every aspect of patient care and every detail of a patient's welfare were his concern He possessed the knack of modifying the attitude of the patient from one of despair to one of hope Through his efforts many adults emerged successfully from a long, depleting childhood illness Because of his interest in patients as human beings, he continued to serve as visiting physician at the House of the Good Samaritan and the Massachusetts General Hospital until his untimely death

As Teacher he was amazingly successful He inspired young students to contribute their utmost This attribute was succinctly stated by one of his former students, now an outstanding neurosurgeon, who wrote, " Dr Jones was teaching more than medicine, he was teaching dedication This was but natural to a man living a dedicated life He maintained contact and interest in his students long after their graduation He was always

available to them, aided in planning their postgraduate training, and stood by until they had successfully launched their professional careers

Dr Jones was interested in the young man who wished to test himself in the field of research Many young physicians owe their interest in the rheumatic diseases to Dr Jones He was of firm belief and conviction that young men of promise were far more important than research projects It was he who found them, nurtured and encouraged them, and stood ready to reinforce their inspiration Their record of accomplishment has been excellent and stands as a lasting tribute

As Investigator his work in the rheumatic fever field has added greatly to our knowledge of this disease and its life course He was particularly interested in its epidemiology, etiology, and disease mechanism Toward these latter goals he did important research concerning the role of the hemolytic streptococcus in the production of this disease, and explored extensively the possibility of a viral etiology His major contribution was the Jones Criteria for the diagnosis of rheumatic fever These criteria were developed at the request of the Armed Forces and were originally published in 1944 (*JAMA*, 126 481, 1944) They were re-examined by Dr Jones when criteria were set up for the five-year United States-United Kingdom 'Cooperative Rheumatic Fever Study" They were modified after his death, and are now known as "The Jones Criteria (Modified) for Guidance in the Diagnosis of Rheumatic Fever" They are official diagnostic criteria for rheumatic fever issued by the American Heart Association and are in international use

Dr Jones was dedicated to the search for new knowledge, and was a relentless and unyielding opponent of the shoddy, the careless, and the inept, he was never content with a narrow approach He vigorously embraced the concept that the value of knowledge gained through research lay not only in its effective application but also in the opening of new avenues of approach to even greater knowledge

As Medical Statesman soon after assuming his position with The Helen Hay Whitney Foundation, Dr Jones brought to the medical profession new concepts of research and alerted members to their responsibilities in the fields of education and public health He was ever ready to assume added responsibilities if they furthered the best interests of medicine and medical research, and he never counted the cost in time and strength His convictions on matters of principle were firm and unshaken

He was interested not only in the collection of scientific facts but in their application for the benefit of the patient It was this interest which led him to accept his last important position He devoted considerable time to the United States Public Health Service and its first National Heart Institute It was through the efforts of Dr David Rutstein, then Medical Director of the American Heart Association, and Dr Jones that there was enlisted the enthusiastic and effective support of Dr Leonard Scheele, then Surgeon-General of the United States Public Health Service, and Congressman Jacob K Javitz, now serving as a United States Senator from New York, in directing the attention of the Congress to the need for governmental support of research in the field of cardiovascular disease In 1948 the National Heart Act was passed by the Congress, authorizing the National Heart Institute

Dr Jones' qualities of mind and spirit were equally apparent in his important role as a member of the first National Advisory Heart Council To secure almost instantly the respect of such a heterogeneous group through the clarity of his views was no small accomplishment, to win the affection of all despite the vigor and complete frankness of his speech was an unique achievement His continued pleas for the support of people rather than of projects were largely responsible for policies which will influence medical research for decades—and perhaps for centuries

His last major contribution in the field of medicine was to the Medical College of Alabama In 1954 Dr O C Carmichael, then President of the University of Alabama, requested Dr Jones to serve as chairman of a Special Survey Committee to offer advice concerning changes in policies at the University of Alabama Medical Center He and his colleagues, Dr Max Lapham Dean of Tulane University School of Medicine, and Dr Jack Masur, presently Director of the U S Public Health Service Clinical Center, devoted many months to this important assignment The final report of this Committee contains a vast amount of informative material which is basic to the problems confronting medical schools, administrators, and educators

Dedicated as he was, Dr Jones did not reveal, even to his closest friends, that the stress of this last difficult assignment was likely to accelerate his severe hypertension which was soon to prove fatal Thus ended—all too soon—the life of one who is honored by the award given in his name

GAMMA GLOBULIN AND INFECTIOUS HEPATITIS

Gamma globulin has been known to be capable of preventing hepatitis with jaundice since World War II In 1951, Stokes and his associates [1] reported prolonged protection in institutional outbreaks for groups given gamma globulin These investigators postulated subclinical infection resulting in active immunity superimposed on passive immunity, which they termed "passive-active immunity"

In this issue of THE JOURNAL, p 823, Krugman and co-workers, who worked in an institution where

the incidence of hepatitis was high, describe studies which tend to support this hypothesis Controlled trials of gamma globulin showed 2-, 5-, 10-, and 30-fold reductions in attack rates of *icteric* hepatitis in those given gamma globulin as compared with the controls A most important observation was made in small groups investigated for *sub-clinical* hepatitis, no difference in attack rate was found between the groups injected with gamma globulin and the controls Under these conditions gamma globulin appears to suppress jaundice but not infection Measles, modified by gamma globulin, is the obvious parallel to be drawn If it can be shown that "modified hepatitis," i e, without jaundice, is as benign as modified measles and is also followed in most cases by immunity, then this method of artificial active immunization against infectious hepatitis should be recommended

Another important question concerns the dosage of gamma globulin required, especially for adults Krugman and associates found that, although a dose of 0 01 ml per pound of body weight was effective in reducing overt hepatitis with jaundice in children, the same dose was not effective in a small group of exposed adults Other studies reported in the literature fail to show that a dose of 0 01 ml per pound of body weight is sufficient in adults There is ample evidence from studies in children that 0 06 ml per pound provides better protection than does the smaller dose The efficacy of 0 06 ml in adults also seems well established Accordingly, until new information to the contrary is available, it appears desirable to give gamma globulin in the optimum dose of 0 06 ml per pound of body weight to children, and especially to adults exposed to hepatitis

1 Stokes, J Jr and others Infectious Hepatitis Length of Protection by Immune Serum Globulin (Gamma Globulin) during Epidemics *JAMA* **147** 714-719 (Oct) 1951

STRUCTURE VERSUS FUNCTION OF ANTI-INFLAMMATORY STEROIDS

A new and highly complicated field of investigation, important both in physiology and in practical therapeutics, has been created by the development of chemically modified adrenocortical steroids The serious study of synthetic analogues of hydrocortisone and cortisone did not begin until 1954 because until then steroid chemists were preoccupied with the urgent need of devising methods for the large scale manufacture of these hormones, similarly, biologists and physiologists were busy characterizing their manifold physiologic effects Indeed, it then appeared that research in this direction would probably be unprofitable anyway, as the supposition prevailed that man could not improve on natural glandular products which possessed such a high order of activity

In 1953, Fried and Sabo discovered that the anti inflammatory and certain other physiologic functions of hydrocortisone were altered decidedly when halogen atoms were substituted at the ninth carbon position of the steroid nucleus This observation dispelled the idea that the natural hormones could not be improved on It brought hope that chemists might modify the molecular structures of hydrocortisone and cortisone so as to eliminate or attenuate certain unwanted actions and yet retain their anti-inflammatory properties Since then, a number of configurational changes and chemical substitutions at one or another carbon position have been made in the steroid molecule Those that have proved to be of direct or indirect therapeutic interest include fluorination at C-9 and C-6, dehydrogenation at C-1 and C-2 and at C-6 and C-7, methylation at C-2, C-6, C-16, and C-21, hydroxylation at C 16, and desoxygenation at C-21 When introduced singly, each of these modifications has altered one or more biologic function of the parent steroid When introduced in combination (two, three, or even more), extremely complex analogues have been produced, some of which have exhibited unique and even bizarre properties Laboratory and clinical studies conducted with these artificial compounds during the past six years have yielded useful, though still fragmentary, information regarding the structure-function relationship of steroids

The biologic activity of hydrocortisone is greatly intensified by the addition of a fluorine atom at its ninth carbon position, 9α-fluorohydrocortisone (fludrocortisone) is roughly 10 times more powerful than its precursor in antirheumatic, eosinopenic, ACTH-suppressing, and anti-inflammatory effects But the compound's sodium-retaining and potassium-losing properties are augmented even more (about 125 times), and excessive salt retention has prevented its systemic application as an anti inflammatory drug In general, the introduction of a fluorine atom at the sixth carbon position intensifies anti-inflammatory glycogen deposition and eosinopenic activities, though not to as great a degree as 9α-fluorination And by contrast, the presence of fluorine at C-6 exerts little or no influence on electrolyte metabolism

The introduction of a double bond (dehydrogenation) at the first and second carbon positions of cortisone and hydrocortisone enhances anti inflammatory potency and glycogen deposition without increasing electrolyte activity correspondingly Prednisone and prednisolone are the best known preparations containing this modification their antirheumatic potencies per milligram are, on average, about four times greater than those of the parent hormones Mainly because the incidence of salt and water retention is low with clinically effective dosages, the drugs have been attractive therapeutically The placement of a double bond at the C-6—C-7 position apparently renders an inconstant

effect the modification markedly decreases or eliminates anti inflammatory activity of 11-ketosteroids (cortisone series) but fails to alter inflammatory or other biologic functions of certain 11β-hydroxy compounds (hydrocortisone series)

Compounds containing a methyl grouping at the second carbon position display increased anti-inflammatory activity but also cause prohibitive degrees of salt and water retention However, the addition of a methyl group at the C-6 position does not aggravate sodium retention or potassium loss, and, although the influence of this substituent is not consistent, it tends to lower the electrolyte activity of some compounds (for example, hydrocortisone and prednisolone) The results of clinical evaluations with 6α-methylprednisolone (methylprednisolone) indicate that 6α-methylation increases anti-inflammatory potency only slightly and fails to influence other metabolic activities significantly

The addition of a hydroxyl radical at the sixteenth carbon position has resulted uniformly in diminishing glucocorticoid potency and in drastically reducing mineralo corticoid activity This modification was the first to make possible the systemic application of 9α-fluorinated compounds as anti-inflammatory agents—for the substituent deprives 9α-fluorohydrocortisone and 9α-fluoroprednisolone of their excessive electrolyte effects while only partially reducing their strong anti-inflammatory properties Triamcinolone, the best known 16-hydroxylated derivative, is the least likely of commercially available analogues to induce salt and water retention

In animal studies, compounds of both the hydrocortisone and cortisone series have displayed alterations in physiologic properties, including intensification of anti-inflammatory action, when a methyl radical is substituted at the sixteenth carbon position The increase in antirheumatic potency has varied considerably and has been most pronounced with compounds which also contain a fluorine atom at the ninth alpha carbon position Sixteen-methylation, like 16-hydroxylation, relieves the severe salt-retaining action of 9α-fluorination and permits compounds containing a 9-fluoro substituent (dexamethasone, for example) to be administered systemically The effect of 16-methylation seems to be the same regardless of whether the radical is placed at the alpha or beta positions Recently a group of compounds containing a hydroxyl radical at C-21, and yet methylated at this position, has been prepared In general, this modification strikingly reduces electrolyte activity without eliminating the anti-inflammatory action and provides another method of eliminating the electrolyte effects of 9α-fluorinated compounds

In this issue of THE JOURNAL, p 835, Boland has compared the therapeutic efficiency of six complex synthetic anti-inflammatory compounds Clinically, it appears that the addition of a methyl radical or a fluorine atom at the sixth carbon position of prednisolone (as in methylprednisolone and fluprednisolone) alters antirheumatic potency but probably does not enhance or reduce the therapeutic index of the parent substance The author's experience suggests that, despite promotional advertising to the contrary, neither triamcinolone nor dexamethasone is superior to prednisone or prednisolone, although each may be applied advantageously in special circumstances The profound influence of structure on function is well exemplified by the two compounds Their complex formulae differ in only a single detail triamcinolone has a hydroxyl while dexamethasone has a methyl radical at the sixteenth carbon position Despite this seemingly subtle variation, dexamethasone has far greater antirheumatic potency and frequently promotes excessive appetite, weight gain, and abdominal girth On the other hand, triamcinolone, when taken in larger but similarly effective antirheumatic doses, commonly promotes anorexia and weight loss It is hoped that, with the accumulation of precise information as to the influence of structural changes on physiologic functions, steroids possessing wide dissociation between wanted and unwanted properties will eventually evolve

TRANSPLANTATION OF MARROW IN MAN

Ferrebee and Thomas[1] discuss the problems associated with transplantation of marrow in man in the current issue of the *Archives of Internal Medicine* (Oct 1960) Except in the case of identical twins, the genetic differences in the chromosomes of host and donor excite an immunologic response to a transplant by the recipient resulting in the rejection of the graft one or two weeks after its implantation The reaction to the graft by the lymph centers of the recipient causes invasion of the graft tissue with round-cell infiltration and inflammatory change The reaction on the part of the lymph centers of the host plays the most important part in this process Thus, grafts protected against lymphocytic invasion by semi-permeable membranes remain alive until accumulations of fibrous tissue impair nutritive exchange It was also observed that persons in whom cellular resistance is diminished by disease, chemotherapy, or radiation retain grafts for prolonged periods

An attempt was made to change the cellular responses to genetically determined antigens in transplanted tissues Two methods proved successful in producing chimeras,[2] animals in which cells of different genotype, with chromosomes and genes that are not the same, live peaceably together The first method involves an active acquisition of tolerance for the graft by the host Thus, in an adult that has been conditioned in fetal life, challenge by organ transplant from the conditioning donor is unresisted The graft survives indefinitely

In the second method the animal is first irradiated in order to suppress hematopoiesis and lymphopoiesis and is then given an infusion of bone marrow Marrow function is quickly restored, but the mature lymphocytic cells present in the injected marrow react against the host's tissue as antigens This phase is referred to as a *graft versus host reaction* The lymph nodes and the spleen produce an accumulation of plasma cells in the graft, fibrinoid change, necrosis, and hemorrhage These reactions may be fatal A return to normal histology and normal defense mechanisms in the lymph centers during this period can be aided by isolation of the patient from sources of infection, and by the administration of antibiotics and drugs capable of depressing excessive graft versus host reaction The immunology of lymph organs may be restored after one or two months The repopulating cells are then tolerant to antigens of both host and donor genotype Subsequent organ transplants from the marrow donor will remain unchallenged and survive indefinitely

Ferrebee and Thomas discuss the question of the applicability of these observations made in animals to clinical states in man Can viable marrow cells be infused into human beings without an immediate harmful effect? Postmortem histologic studies made shortly following infusions of marrow into terminal patients showed that infused marrow cells can pass through the pulmonary capillaries and reach the sinuses of the reticuloendothelial system where they divide and multiply Rapid restoration of marrow function in irradiated patients attested the viability and effectiveness of the suspensions used

Determination of the amount of radiation necessary to destroy the immune response and the necessity of working within the limits of radiation tolerance, particularly in ill patients, present a difficult problem It appears from a few clinical experiences that a leukemic patient in relatively good physical condition can tolerate as much as 2,000 r continuous whole-body exposure administered at the rate of 2 r per minute The authors also stress the necessity for determining whether recovery from the late effects of these exposures is possible During the period following the infusion of bone marrow the patient can be aided by supportive treatment, such as isolation from sources of infection, use of antibiotics, and transfusions of fresh blood Such treatment is desirable for the four or five weeks required for the patient's own marrow to regenerate from remnants that had escaped destruction during radiation Leukemic patients irradiated and transfused with marrow taken from their identical twins showed a return of marrow function after one or two weeks in contrast to four or five weeks required for autogenous regeneration of marrow

Mathé and his associates[2] treated five patients who were accidentally exposed to very high doses of neutrons and gamma radiations After three weeks of the usual clinical treatment, they manifested an extremely serious hematologic crisis and were then given bone marrow injections A rapid clinical improvement followed and a correction of bone marrow blood cytopenia took place A study of the phenotypes of the red cells produced by the grafted marrow and by the hemopoietic tissue of the patients suggested that the production of blood cells from the transfused bone marrow continued for about one month

Mathé and his associates[3] also report on three patients with acute lymphatic leukemia in remission whom they treated with 850 rads of cobalt followed by transfusions of homologous marrow During the first week following treatment digestive disturbances and lymphoid and myeloid pancytopenia were present Total aplasia persisted for the next one to 15 days and was characterized by fever, necroses, and a hemorrhagic tendency One patient died from a respiratory complication before any evidence of marrow activity had returned In the other two patients the cytopenia gradually diminished between the eighteenth and twenty-eighth day after irradiation The clinical symptoms cleared when circulating granulocytes appeared About the forty-fifth day secondary syndromes developed with digestive symptoms, infections, loss of weight, abnormal gamma globulins, and lymphoid aplasia This syndrome disappeared a month later when the lymphocyte counts rose with the simultaneous disappearance of the donor phenotype red cells A relapse of the leukemia occurred in these two patients after six and five months of complete remission

Atkinson and his co-workers[4] treated an 18 month-old girl with acute lymphoblastic leukemia by body exposure to 255 r and followed it by marrow transplantation taken from her normal identical twin sister A remission aided by exhibition of prednisone, 6-mercaptopurine, and amethopterin lasted eight months, at which time the child manifested symptoms of acute leukemia with resulting death

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DANGER IN THE USE OF INTRATHECAL METHYLENE BLUE

The tragic sequelae in 14 patients in whom methylene blue had been introduced into the lumbar subarachnoid space are documented in this issue

of THE JOURNAL, p 856 Neurosurgeons have long used methylene blue to color the ventricular fluid above the point of block in order to determine whether or not surgical attack has relieved the obstruction

The report of these cases indicates that, although it may be at least relatively safe, because of the immediate dilution of the dye, to introduce a small amount into greatly dilated ventricles, it is quite another matter to introduce the dye into the relatively limited confines of the spinal subarachnoid space where the concentration of dye is inevitably greater and the exposed neural elements much more susceptible

The authors of the article have, by personal correspondence and by contacting representative neurological and neurosurgical groups, made an effort to spread widely the knowledge of this danger, and it is hoped that the present report will make even less likely the recurrence of further such mishaps The manufacturer of the dye, which is produced for quite different purposes, has been alerted and has indicated his willingness to warn against intrathecal administration on the vial

THIAZIDE DIURETICS IN TOXEMIA OF PREGNANCY

In the June 11 issue of the *British Medical Journal*, page 1807, appeared a report by Drs John Watt and Elliot E Philipp of five cases of intrauterine fetal death which occurred in patients with toxemia of pregnancy who were taking chlorothiazide These authors implied in their communication that these fetal deaths were related to the use of the oral diuretics

In his comments regarding the above communication, published in the July 9 issue of the same journal on page 148, Dr R T Sears stated that, while diuretics remove some of the manifestations of the disease, they do not attack directly its cause He further stated that the intrauterine deaths may have been caused by the placental changes which occur in toxemia and may have had no relation to the use of diuretics Because of the many inquiries which have been made regarding these controversial communications, it seems desirable to express a personal opinion on this subject

It should be stated at the onset that, despite complete ignorance of the primary cause of toxemia of pregnancy, the basic pathological physiology of this disease has been well established It is unanimously agreed now that the chief abnormality underlying toxemia is an over-all vasoconstriction which affects vital organs such as the brain, the kidney, and the uterus Clinically, toxemia is manifested by hypertension, edema, proteinuria, and, in severe cases, convulsions and coma

The extent of the damage to the uterine and placental circulation caused by the arteriolar vasoconstriction cannot as yet be assessed by any clinical or laboratory procedure Some investigators believe that uterine and placental ischemia may even precede the clinical manifestations of toxemia This ischemia is probably responsible for the high fetal mortality which accompanies toxemia It is conceded that the perinatal mortality directly or indirectly related to toxemia varies from 15% in the patients with the best prenatally controlled cases to 45% in the patients with little or no prenatal care The national average in the United States is around 20% It is also recognized that babies of toxemic patients are usually smaller than babies of normally pregnant women of the same period of gestation

These two facts, namely, high perinatal mortality and slow fetal growth, suggest circulatory and nutritional impairment of the placenta and fetus This hypothesis is supported by studies from laboratories of the University of California as well as from those of McClure-Brown in England, which showed that the total uterine and placental blood flow and oxygen consumption in toxemia is markedly reduced in relation to normal pregnancy of the same period of gestation This reduction, together with the many infarcts which are usually found in toxemic placentas, are most likely related to the slow growth of the fetus and the high fetal mortality

In a consideration of the treatment of toxemia, it is obvious that in the absence of accurate knowledge of the primary cause attention should be directed to the main pathological abnormalities which underlie the disease process Since edema and hypertension are the predominant manifestations, treatment should begin with correction of these two abnormalities with proper diuretics and vasodepressor drugs These agents not only have simplified the management but also have become an integral part of the over-all treatment of the disease

No one claims that these drugs are the cure for toxemia The physician should keep in mind that the use of these agents is primarily designed to correct a pathological abnormality in the same manner and for the same purpose that digitalis is given in heart failure He should not forget that the patient should be treated as a whole with adequate consideration to all the factors involved Diuretics, vasodepressor drugs, and mild sedatives should be employed in order to control the acute phase of the disease and allow the pregnancy to reach viability It is well accepted by the great majority of investigators that hasty interference in the acute phase of the disease may prove to be more damaging than beneficial to both mother and fetus

As to the use of thiazide diuretics per se, there is no concrete evidence that these agents do any harm to the fetus Data collected from the laboratory of the obstetrics and gynecology department of the University of California on the passage of chlorothiazide from mother to fetus have shown that, if the drug is given to the mother two to three hours prior to delivery, only 1 to 2% is encountered in the fetal blood However, if the drug is discontinued prior to initiation of labor (eight hours prior to delivery), then no chlorothiazide is found in the fetal blood Although the members of the department believe that the small amount which passes to the fetus is probably innocuous, it has been their habit to discontinue the administration of these drugs two to four hours prior to delivery of the infant

The advent of the new oral diuretics has been a forward step in the management of edema in general and toxemia in particular The death of a fetus in a patient who is receiving one of the drugs cannot be interpreted as a contraindication for their therapeutic use Fetal deaths occur in patients with acute toxemia and with other forms of hypertensive diseases associated with pregnancy unrelated to diuretics It is unsound and unscientific to withhold any form of treatment which might be beneficial to an ill mother on the basis of inadequate evidence

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GENETICS AND THE PHYSICIAN

Unless the physician has attempted to familiarize himself with genetics and to keep pace with its rapidly changing concepts and theories, he is likely to prove a source of misinformation to his patients, quite unwittingly It is typical of people in general, in our conforming world, that they accept unquestionably the word of authority, regardless of the validity of that word For the layman, the physician is the authority on human genetics, whether he is familiar with it or not One of the things anyone exposed to a little genetics is likely to know is that, since brown eyes are dominant and blue eyes recessive, obviously two blue-eyed parents cannot have brown-eyed children This has been taught for many years, in high school science courses and in some college genetics courses Fortunately, for the peace of mind of such brown-eyed offspring, a modern understanding of the biochemical relationships of the gene to the characteristic, and of populational genetics, tells us that it is perfectly feasible for faithful blue-eyed couples to produce brown-eyed children, even though the old mendelian relationships of "dominant" and "recessive" deny it

Inadequate background in this science is to be expected if formal education was taken when genetics was nothing more than wrinkled sweet peas, Punnett squares, 3 to 1 ratios, and fruit flies disporting themselves in milk bottles Modern emphasis is on the primary role of the genes in the basic biochemical processes of the individual cells and the means whereby the genes control metabolism, behavior, and growth Such information should be basic to the training of all prospective doctors because it is basic to life

I suggest that re-evaluation of medical school requirements is indicated The old traditional course in comparative anatomy, taught originally as the basis for the understanding of evolution, converted into a stumbling block for the premedical student and now, primarily from force of habit, a prerequisite for admission to many medical schools, should be replaced in our curricula by a strong foundation in genetics Genetics should become a basic requirement for entrance into medical school, and all undergraduate institutions should re-evaluate and reorganize their genetics courses with this requirement in mind

I do not believe that the reorganization should necessitate a course in human genetics in college On the contrary, I would suggest elimination of human genetics from the undergraduate course, which would then emphasize physiological and biochemical genetics The results of extensive and detailed experiments are founded on data accumulated from thousands of generations, and nothing even remotely comparable with this is available concerning humans Human genetics must always be a science of deduction and extrapolation, and should not be taught until the basis for such extrapolation is clearly understood I would suggest a strong de-emphasis of what most people think of as genetics, such things as mono- and dihybrid crosses, dominance, ratios, and Punnett squares These items are important historically, but do not play a significant part in genetics today

I propose that undergraduate studies, as outlined above, should be followed by a thorough study of human genetics in the medical school An understanding of what is and what is not known about genetics should be a vital part of the operating knowledge of a physician Too often such knowledge is completely lacking, a review of the catalogues of several medical schools indicated that none of them lists a course in genetics How many physicians today can differentiate between the straight-line, cumulative genetic effects of radiation as contrasted with dosage-level controlled somatic effects? Biologists, and particularly geneticists, have been forced to interpret the social implications of their work and to translate research results in genetics into lay language The physician cannot be too far behind in this interpretation since his patients depend upon him for the answers

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CLINICAL NOTES

Activity Of Carbonic Anhydrase In Erythrocytes Of Patients Suffering From Pulmonary Alveolar Microlithiasis

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Pulmonary alveolar microlithiasis is a rare disease, there being only 50 or 60 cases described in the medical literature Since, as a rule, persons with this condition are completely asymptomatic, the diagnosis is usually made after a routine radiographic examination of the thorax The disease is characterized by the presence of microliths of calcium carbonate and phosphate free in the pulmonary alveoli A roentgenogram of such lungs usually shows numerous small calcifications about the size of grains of sand distributed through all of the bronchial ramifications

The etiology of microlithiasis is unknown, but it seems reasonable to assume that the disease results from a disturbance in the metabolism of carbon dioxide As a result, the medium at the surface of the alveoli becomes more alkaline, which favors the precipitation of the microliths The most comprehensive review of this disease is that written by Sosman and others [1] in 1957 These authors include the suggestion that possibly the disease might result from a change in the activity of carbonic anhydrase

The present investigation was undertaken to test this hypothesis It was based on a comparative study of the activity of carbonic anhydrase in the erythrocytes of 3 Colombian patients who were suffering from microlithiasis and in those of a group of 16 normal individuals, 15 of them students at the Universidad de los Andes The patients were three of four sisters, one of whom died of microlithiasis, who live in Bucaramanga, Colombia, and were studied by Dr Esguerra-Gomez and collaborators [2] in 1959

The blood samples were obtained by venipuncture, and heparin or citrate was used as an anticoagulant The blood samples from the three patients and from one normal sister were flown from Bucaramanga to Bogotá packed in ice and were studied within six hours from the time the blood was drawn The blood samples from the other controls were used immediately The cells were washed twice with Ringer-Locke solution, after which a measured aliquot of cells was hemolyzed in water Dilutions were made from this hemolysate for the enzyme assays Miyake's and Pincus' [3] modification of the method of Philpot and Philpot [4] was used for assaying the activity of carbonic anhydrase Another aliquot of cells was dried to constant weight at approximately 100 C (212 F)

The results were as follows For the 15 controls from the university, the average value for enzyme activity was 1,049 Philpot units and the values ranged from 952 to 1,250 Philpot units For the other control, the normal sister, the average value for enzyme activity was 1,112 Philpot units For the three sisters with pulmonary alveolar microlithiasis, the average value was 1,156 Philpot units and the values ranged from 1,134 to 1,195 Philpot units It can be seen that the erythrocytes of the normal sister and of the three sisters with pulmonary alveolar microlithiasis had a carbonic anhydrase activity which is within the range of that of the normal cells On the basis of these experiments it can be concluded that the erythrocytes of the three patients had a normal activity of carbonic anhydrase

This study was supported by a grant-in-aid from the Rockefeller Foundation Dr G Esguerra-Gomez and Dr B Jimenez-Peñuela helped the authors to obtain the blood samples used

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A New Device for Measuring Urinary Output Hourly

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Knowledge of the hourly volume of urine excreted is often of value in managing certain severe fluid and electrolyte abnormalities such as severe burns, intestinal obstruction, and acute renal failure A new urometer has been devised which permits hourly measurement of urine output simply and accurately

Basically, a plastic 100-cc graduate cylinder has been adapted to fit into tubing connecting an indwelling bladder catheter to a collection jug (see the figure) A simple pinchcock is applied at the lower end of the cylinder As urine flows down the tubing, it collects in the cylinder A small hole in the top of the cylinder provides an air vent A nurse reads and records the volume of urine in the cylinder on the hour, opens the pinchcock, and allows the urine to drain into the collection jug The pinchcock is released, and the urometer is ready to collect for the next period The cylinder is graduated to 5 cc, which permits accurate observation of volume within 2 to 3 cc A removable plastic top permits easy cleaning of the cylinder with a bottle brush The cylinder is attached to the bed sheet by a safety pin

We have found this device useful and simple It provides accurate hourly measurement of urine and, at the same time, enables one to save all urine excreted It is simple to clean, durable, and inexpensive

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From the Medical College of Virginia

New urometer

Hydrochloric Acid Burns of the Stomach

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The ingestion of caustic acid produces effects on the gastrointestinal tract quite different from those caused by strong alkalis Either acid or alkali usually results in a stomatitis and inflammatory reaction of the tongue and pharynx In the case of alkalis, however, the major damage usually is in the esophagus, with acids it is usually in the stomach Alkalis cause so much spasm on contact with the esophageal mucous membrane that they may not reach the stomach at all, if they do, they tend soon to be neutralized by the gastric acids and are unlikely to produce a lasting burn Acids, on the other hand, are less damaging to the squamous cells lining the esophagus but set up severe reactions when they come in contact with the columnar epithelium of the stomach Active muscular spasm is initiated in the stomach, particularly in the antrum, where the corrosive is retained long enough to cause prolonged damage

The anatomic separation of the sites of maximum injury by alkalis and acids is statistical and by no means absolute In reviewing 139 cases of pyloric stenosis resulting from acid ingestion, Gray and Holmes[1] found that 20% of the patients exper-

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enced esophageal stricture as well They also pointed out that about 20% of patients who imbibe caustic alkalis develop strictures of the stomach as well as the esophagus

Any one of the strong acids is capable of producing such changes Perhaps the commonest offender, because the most easily obtained, is sulfuric acid Such violent damage results that frequently the stomach is perforated and the patient dies of a fulminating peritonitis Hydrochloric acid produces reactions which are somewhat less severe but which cause late scarring which necessitates surgical repair Nitric acid may produce severe lesions, and marked damage has been reported from ingestion of a variety of salts, including ferrous sulphate, zinc chloride, calcium chloride, and calcium lactate

Symptoms commence at intervals after ingestion according to the caustic properties of the agent In the case of a strong acid there is immediate onset of burning of the mouth, frothing, and spitting, followed shortly by gagging and vomiting The vomitus is likely to contain shreds of mucosa and to be bloody The acute reactions persist for several days, then gradually subside The patient, who at first must be nourished parenterally, improves to the point where he can take oral nourishment and may leave the hospital to continue his convalescence Three or four weeks after the ingestion, however, vomiting recurs and becomes persistent In most acid-induced strictures, surgical relief of the obstruction becomes mandatory

A graphic description of the condition found by the surgeon was given in 1926 by Lord Moynihan "In my own cases the pyloric antrum has presented the appearance of a normal uterus, the walls are thick and unyielding, the cavity small, and the pylorus projects downwards into the duodenum like the cervix into the vagina"[2]

Report of Cases

CASE 1 —A 23-month-old boy was admitted eight weeks after having drunk hydrochloric acid At the time he had been examined by his physician, who noted a burn on the tip of his tongue but none in the mouth or pharynx No treatment had been given, and the patient had not suffered further symptoms until 22 days later when he commenced to vomit Vomiting had continued since then, about four times a day, anywhere from 15 minutes to two and one-half hours after meals The vomitus was noted to contain mucus and undigested food Roentgenograms showed a normal esophagus but a severe constriction of the body of the stomach (fig 1), which was confirmed at laparotomy A wedge resection of the stenosed segment was performed, and the patient made an uneventful recovery The pathologist reported acute and chronic inflammation of the stomach, with scar formation and nodular hyperplasia of the smooth muscle of the cardia of the stomach At the time of this writing, the patient has remained well and free of gastric symptoms for two years and seven months since discharge from the hospital

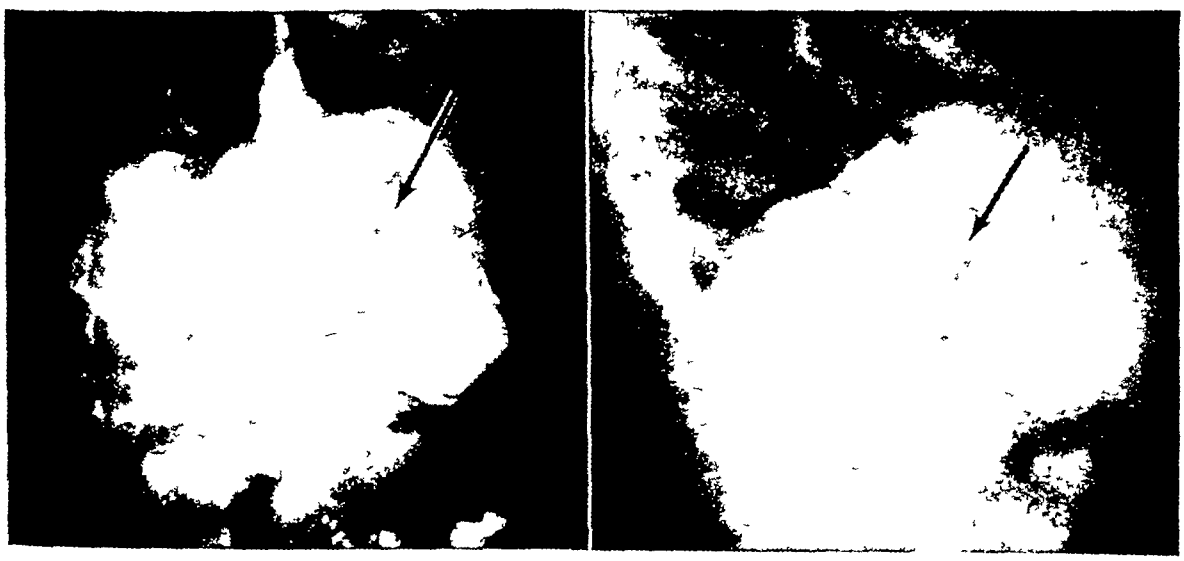

Fig 1 (case 1) —Oblique and lateral views of the stomach two months after ingestion of hydrochloric acid Arrows point to severe constriction of proximal part of stomach Antrum also was constricted, and films indicate that gastric emptying was markedly delayed

CASE 2 —A 4½-year-old boy found a glass of hydrochloric acid being used by plumbers at a construction site and drank an estimated 2-oz (57 Gm) He immediately ran to his home next door, smoking from his mouth and gagging His mother gave him raw egg, which he immediately brought up He was taken to the emergency ward of another hospital, where he arrived within one-half hour after his injury He was observed there to be coughing and spitting up a brown material Emergency treatment consisted of soda and milk by mouth and fluids given intravenously [illegible] mother [illegible] the information that he wo[illegible] [illegible]ost [illegible]ng and that a year [illegible] he h[illegible] his [illegible]

ly with iodine He was transferred to Babies and Childrens Hospital, where he was observed to be acutely ill and lethargic, experiencing some respiratory distress, and having trickles of blood running out of the side of his mouth Treatment included a tracheotomy, fluids given intravenously, streptomycin, penicillin, and a humid-air room The patient responded and after three and one-half days commenced to take liquids by mouth

Convalescence progressed, but the patient continued to vomit, particularly after eating solid foods Esophageal dilations were carried out twice Successive roentgenographic examinations showed progressive constriction of the distal part of the stomach (fig 2) Finally, eight weeks after the injury, a laparotomy was performed and a partial gastric resection carried out A gastroduodenostomy connected the pars media of the stomach to the duo-

Fig 2 (case 2) —Progressive constriction of gastric antrum (see arrows) *A*, three weeks, *B*, five weeks, and *C*, seven week after ingestion of hydrochloric acid *C*, pyloric outlet is seen to be severely compromised *D*, 24 hour film at seven weeks show ing that about 50% of meal remained in stomach one day after patient was given barium

denum The pathologist's report was acute gastritis with ulceration, fibrosis, and recent hemorrhage

After discharge from the hospital, the patient's parents complained that he continued to vomit after meals Four more hospital admissions ensued in the next 10 months, but no vomiting was observed while the boy was hospitalized The parents were disinclined to accept a psychogenic basis for the vomiting and took the boy to other doctors Elsewhere he had two more operations, said to be a resection of an esophageal stricture and an anastomosis of a segment of transverse colon to connect the esophagus to the stomach

Summary

Acid ingested by a patient tends to produce its most severe damage in the stomach, whereas alkali affects the esophagus more markedly Hydrochloric acid ingested by two children produced typical strictures of the stomach which necessitated surgical resection to relieve obstruction

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Toxic Reactions to Chlordiazepoxide

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The search for a drug that will reduce anxiety and nervous tension without intoxication or the risk of excessive self-medication has resulted in the release of many new 'tranquilizing' agents Among these is chlordiazepoxide hydrochloride (Librium), which has been advertised as producing tranquilization without sedation Although this compound has generally been effective without many side-effects, an occasional patient will react adversely, especially to a higher dosage The following case reports are examples of this

Reports of Cases

CASE 1 —A 52 year-old man was discharged from the hospital on a regimen of 20 mg of chlordiazepoxide four times daily Except for some residual nervous tension, he had responded well to 6 electroshock treatments for a nonpsychotic depression

After taking 80 mg of chlordiazepoxide daily for 10 days his wife telephoned and said that he was acting as though he were intoxicated although he was not drinking any alcohol or taking any other medication He was uncoordinated dropping objects, ataxic and had slurred speech He became confused and imagined that there were people in the house and that babies were coming out of the television set

The patient himself attributed his difficulties to the medication and readily agreed to discontinue taking the chlordiazepoxide His condition gradually improved, and after four days he was back to his normal self and working again

CASE 2 —A 48 year old man was being treated for a severe anxiety tension state Known as a former alcoholic he had his sedative and tranquilizing medications entrusted for safe keeping to his wife, who was reliable

On one office call he was given a sample of 50 capsules of 10 mg of chlordiazepoxide I told him to try one capsule three times daily but failed to inform his wife Three days later she brought him back to the office in an intoxicated condition saying that he was so drunk that his head would fall into his plate of food as he was trying to eat

There was no question of his having been drinking or dipping into any other medication except the sample of chlordiazepoxide that I had given him The wife finally retrieved what remained of the chlordiazepoxide, and his condition cleared in about three days I was never able to ascertain exactly how much of the chlordiazepoxide the patient had been consuming, except that it was well in excess of the three tablets a day that I had specifically prescribed

CASE 3 —This patient was another former alcoholic for whom I had carelessly prescribed a refillable order for chlordiazepoxide, not realizing that it might be habit forming As in the previous case, his wife telephoned, asking that I discontinue the prescription since the patient was getting drunk on it Instead of the prescribed 4 capsules, he had been taking 12 a day He had a history of excessive self-medication with meprobamate but his wife said that the effects of the chlordiazepoxide were even worse

CASE 4 —A 30 year-old woman was in the hospital with an extreme case of anxiety Because no other medication had given her relief, she was allowed to take 160 mg of chlordiazepoxide a day since this was the only drug that allayed her suicidal panics After eight days on this dosage, she became so intoxicated that she was falling, and finally fractured her sacrum The use of chlordiazepoxide was discontinued, but it was five days before she was mentally clear and free of incoordination

Summary

Chlordiazepoxide hydrochloride (Librium) can produce intoxication and mental confusion in doses in excess of 80 mg daily, and, even at this dosage, in susceptible individuals Caution must be exercised in prescribing chlordiazepoxide for alcoholics or other addiction-prone patients, because of the danger of excessive self-medication The possibility of cumulative action in higher doses is suggested by the gradual onset of intoxication and the prolonged period (three to five days) required for detoxification

From the Department of Psychiatry University of Washington Medical School

Congenital Absence of the Gallbladder

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Congenital absence of the gallbladder is a rare anomaly of the biliary tract Recently, three additional patients were seen at the Lahey Clinic within a few months of each other

The approximate incidence of this anomaly, derived from autopsy statistics reported by Monroe and Ragen,[1] was 0 09 per cent (33 instances in a series of 35,626 necropsies) The reported incidence in children is 0 37 per cent, however, considerably higher than the over-all incidence, and in keeping with the higher incidence of all congenital anomalies in children

The anomaly is observed at necropsy about equally in both sexes Clinically, it is observed about twice as often in females as in males, which is in accord with the usual sex ratio in surgical disease of the biliary tract[2]—that is, the anomaly apparently occurs as often in men as in women, but disease of the biliary tract requiring operation is found twice as frequently in women

During surgery or at necropsy it is extremely important for the surgeon or examiner to examine the area closely before making a diagnosis of congenital absence Flannery and Caster[3] classified the abnormalities of the gallbladder and reported 101 cases of congenital absence of the gallbladder up to 1956 They listed the following as reasons for the apparent absence of the gallbladder 1 The gallbladder may be atrophic or buried in adhesions after many attacks of cholecystitis 2 The gallbladder may be intrahepatic 3 The gallbladder may have been removed at a previous operation 4 The position of the gallbladder may be abnormal (left side) 5 The gallbladder may be truly absent congenitally Many observers have noted that the gallbladder is normally absent in 26 species of animals

The signs and symptoms in patients with congenital absence of the gallbladder who have disease of the common bile duct are apparently little different from those with a completely normal biliary system

The effect of the absence of the gallbladder on biliary function is controversial Mouzas and Wilson[4] expressed the belief that there is no alteration in function This opinion is not shared by Caylor,[5] however, who believed that this anomaly is frequently associated with symptoms and disease of the remaining biliary tree, and especially the common bile duct In an analysis of 60 cases of congenital absence of the gallbladder reviewed from the literature by Dixon and Lichtman,[6] 35 patients, or 58 per cent, had symptoms suggestive of cholecystic disease and 29 (48 per cent) had jaundice Gallstones were found in the common bile duct or in the hepatic ducts in 16 patients (27 per cent) In 32 per cent of the cases the common bile duct was dilated In this series of 60 patients, 73 per cent of those past the age of 45 had symptoms of cholecystic disease

Of the cases reported in the literature, almost one-half were discovered at operation, which was performed because of signs and symptoms of biliary-tract disease The remaining cases were observed incidentally, either at operation for unrelated conditions or at necropsy This incidence is far higher than the incidence of gallbladder disease in the general population, and it is suggestive of the possibility that, even with an intact biliary tree, the absence of the gallbladder in some way predisposes to disease of the bile duct

The cause of this anomaly is now generally held to be a defect in the embryologic development of the biliary system The biliary tract and liver arise from a ventral outgrowth of the entoderm The cranial portion gives rise to the liver and bile duct, and the caudal portion to the gallbladder and cystic duct The two theories, as stated by Weiner,[7] to explain the congenital absence are (1) failure of the caudal portion to develop from the hepatic diverticulum, which would lead to absence of the gallbladder and cystic duct, and (2) failure of the gallbladder to resolve from its solid embryonic stage According to the second theory, the gallbladder would be absent but the cystic duct would be present

Kobacker[8] raised the possibility that a hereditary defect plays a role, he reported congenital absence of the gallbladder in two sisters

Because of the rarity of this anomaly, the diagnosis is infrequently made preoperatively The absence of the gallbladder shadow on the roentgenogram usually is misinterpreted as indicating a pathological nonfunctioning gallbladder

Report of Cases

Three patients with congenital absence of the gallbladder were recently studied at the Lahey Clinic

CASE 1 —A 66-year-old woman entered the Lahey Clinic on July 18, 1959, complaining of upper abdominal pains, vomiting, and jaundice of eight days' duration She had apparently been in good health prior to this episode She had

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not had any serious illness or operations in the past and had not been taking medicaments The pain was severe and colicky, it occurred in the epigastrium and radiated to her back At the onset, a narcotic injection was given, which partially relieved the pain The next day soreness persisted in the upper part of the abdomen, and she experienced mild chills and fever The urine was dark, and on the third day the patient was icteric The color of the stools was not noted

Physical examination on admission revealed that the patient was well-developed and well-nourished, she was in mild distress and obviously jaundiced The vital signs were stable Positive physical findings consisted of scleral icterus 3 plus, and epigastric tenderness The pertinent laboratory data revealed a total bilirubin level of 5 2 mg per 100 cc Flocculation and transaminase tests gave negative results The urine contained bile, and the cholesterol value was 327 mg per 100 cc At operation, July 21, the common bile duct was found to be dilated to 20 mm, the wall was somewhat thickened and a large cholesterol stone (1 cm in diameter) was removed from the duct. Careful inspection of the biliary system and liver bed failed to reveal the presence of the gallbladder or the cystic duct Convalescence was uneventful, and the patient recovered completely

Case 2—A 34-year-old man came to the Lahey Clinic on Oct 5 1959, complaining of progressive fatigue and epigastric gnawing of a year s duration He had had no serious illness or disease in the past and had had no previous operations His abdominal discomfort was described mainly as an empty feeling but he denied nausea, vomiting, hematemesis, melena, jaundice, rectal bleeding weight loss, constipation, and diarrhea He was troubled with belching bloating, and flatulence

On physical examination the findings were completely negative The hemoglobin level was 14 7 Gm per 100 cc hematocrit, 45 per cent, white-blood-cell count, 9,150 per cubic millimeter, with a normal differential, the Hinton test gave negative results, the sedimentation rate was 38 mm per hour, fasting blood sugar value was 82 mg per 100 cc blood urea nitrogen, 14 mg per 100 cc, and cholesterol, 187 mg per 100 cc Chest roentgenogram, intravenous pyelogram, and electrocardiogram were normal Roentgenologic examination after a barium meal and barium enema gave negative results On cholecystographic study, by the single oral-dose method, the gallbladder was not visualized Intravenous cholangiography was performed, with prompt visualization of the biliary-duct radicals, the common bile duct at the greatest diameter measured 4 mm There was no evidence of stones or obstruction At no time was a gallbladder shadow identified On Nov 10 an exploratory laparotomy was performed The biliary system and liver bed were carefully inspected, and it was noted that the gallbladder and cystic duct were completely absent The patient recovered uneventfully, a treatment program for irritable bowel was prescribed, and he is now asymptomatic

Case 3—A 22-year-old woman was first seen at the Lahey Clinic on Nov 9, 1959, with the chief complaint of recurrent upper abdominal pain of two years duration The abdominal discomfort was described as a crampy, upper abdominal pain, with occasional radiation into the back The pain was frequently associated with belching bloating sour eructation, and nausea The attacks were more severe during periods of tension Fever, chills, and jaundice were not associated In May, 1959, because of persistence of symptoms, the patient had been admitted to a hospital for study A gallbladder x-ray series did not visualize the gallbladder At operation the biliary tree and liver bed were carefully inspected, and complete absence of the gallbladder was discovered

Because of the persistence of her gastrointestinal symptoms, the patient entered the clinic The physical examination revealed a scar in the right upper abdominal quadrant Mild tenderness of the lower abdominal region was elicited The physical findings otherwise were negative Laboratory data, including values for hemoglobin, hematocrit, white-blood-cell count, differential count, blood Hinton test, serum bilirubin urinalysis, sedimentation rate, and alkaline phosphatase, were all normal Roentgenologic study after a barium meal and barium enema gave negative results except for irritability and spasticity of the colon on fluoroscopy Satisfactory visualization of the biliary tract was obtained on the intravenous cholangiogram The common bile duct measured 4 mm in diameter, no calculi or obstruction was evident There was no visualization of the gallbladder or cystic duct, which confirmed the previous diagnosis of congenital absence A bowel management program was begun, and her symptoms improved

Summary and Conclusions

Congenital absence of the gallbladder is a rare anomaly We have reviewed the literature and added three cases recently seen at the clinic The only clinical significance is that the physician should be aware of congenital absence of the gallbladder as a rare cause of its nonvisualization on cholecystograms

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MEDICAL PHOTOGRAPHY—Clinical photography at the [Massachusetts General] Hospital began in the 1880 s In 1887 a gift was received "to help establish a room at the Hospital for photographing cases," and in 1890 George L Kingsley, a surgical externe, gave $802 82 for a small building to house a photographic studio Kingsley obtained an appointment as intern, but became sick and died before the completion of the building, which was then named the Kingsley Studio in his honor It stood near the western end of the Bulfinch Building The Hospital Apothecary acted as the photographer—N W Faxon, The Massachusetts General Hospital 1935-1955, Cambridge, Mass, Harvard University Press, 1959, page 350

Barbiturate Poisoning

Management with a New Respiratory Stimulant

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The purpose of this report is to describe the use of vanillic diethylamide (Emivan), a central nervous system stimulant, in the rapid restoration of spontaneous breathing in a patient with prolonged apnea due to barbiturate intoxication

Report of a Case

A 35-year-old man was admitted to Jackson Memorial Hospital at 8 00 p m on Jan 5, 1960, in a comatose state, approximately three hours after the ingestion of more than 35 1½-grain (100-mg) pentobarbital (Nembutal) capsules In the emergency ward, the patient was comatose, cyanotic, and flaccid The pulse rate was 80 per minute and respirations were described as slow Blood pressure was 120/80 mm Hg Gastric lavage was carried out and 120 cc of urine was obtained by catheterization The patient's blood pressure fell to 80/40 mm Hg, but returned to normal range after administration of 10 mg of metaraminol bitartrate An endotracheal tube was inserted and respirations were maintained by a self-cycling intermittent positive pressure breathing (IPPB) apparatus and the patient was transferred to the ward Physical examination at that time revealed a deeply comatose, areflexic man who was completely apneic when the IPPB automatic cycling device was interrupted Vital signs were as follows temperature 99 F (37 C) pulse 80, and blood pressure 160/100 mm Hg Corneal and gag reflexes were absent and the patient did not move any extremity in response to stimuli The examination of the heart and lungs as well as the rest of the physical examination were within normal limits

Laboratory findings were as follows hemoglobin level, 15 7 Gm per cubic millimeter, hematocrit value 50%, white blood cell count 5,400, with a normal differential The non-protein nitrogen level was 28 mg %, blood sugar level 66 mg %, chloride levels 109 mEq per liter, and carbon dioxide combining power 21 mEq per liter Blood samples for barbiturate taken on admission were subsequently reported as 2 5 mg % Bromide and salicylate levels were normal

Therapy with automatic cycling IPPB apparatus was maintained, with occasional tracheal suctioning for removal of mucoid exudate Intravenous fluids were administered continuously Five hours after admission, deep tendon and gag reflexes were elicited, however, the patient remained comatose and apneic Metaraminol (Aramine) bitartrate therapy was required to maintain normotensive levels

The patient's status was essentially unchanged during the ensuing 16 hours At 5 30 p m on Jan 6 (21 5 hours after admission), 400 mg of vanillic diethylamide was administered intravenously over a period of six minutes, with restoration of regular spontaneous respirations at a rate of 12 per minute Seven hundred and fifty mg of vanillic diethylamide dissolved in about 500 cc of physiologic saline solution was administered at a rate of approximately 50 drops per minute After approximately 15 minutes apnea recurred, and automatic cycled respiration was resumed At 6 20 p m an additional 250 mg of vanillic diethylamide was injected intravenously, with resumption of spontaneous respirations Five hundred mg of vanillic diethylamide was added to the intravenous infusion bottle and delivery was continued at 50 drops per minute Spontaneous respirations continued unabated thereafter The IPPB apparatus was then employed for assisted breathing

The appearance of generalized muscle tremors at approximately 7 p m was managed by dilution of the remaining vanillic diethylamide containing intravenous fluid (approximately 220 cc) with 700 cc of 5% dextrose in water and deceleration of the infusion to 15 drops per minute, with subsidence of the tremors Spontaneous respirations continued Vasopressor therapy was not required after this time

At 11 00 p m vanillic diethylamide therapy was discontinued when generalized muscle twitchings again appeared Lumbar puncture revealed an opening pressure of 280 mm of saline With the administration of 70 Gm of lyophilized urea, over a two-hour period, the muscular twitchings ceased and a repeat determination revealed the cerebrospinal fluid pressure to have fallen to 180 mm

Resident in Medicine, Jackson Memorial Hospital (Dr Cole), Assistant Professor of Internal Medicine, University of Miami School of Medicine (Dr Marks), and Chief, Non-tuberculous Chest Disease Section, Veterans Administration Hospital, and Assistant Professor of Medicine, University of Miami School of Medicine (Dr Baum)

The patient was noted to be awake, although still lethargic, and he coughed out the endotracheal tube at 7 30 a m the following morning (14 hours after the first dose of vanillic diethylamide and 35½ hours after admission) Recovery was uneventful except for a complicating cystitis, which was detected on the fourth hospital day Urine culture revealed a paracolon bacillus The infection was successfully managed with administration of chloramphenicol and erythromycin The patient was discharged on the ninth hospital day

Comment

The pharmacology and toxicity of vanillic diethylamide (3-methoxy-4-oxy-benzoid acid diethylamide), a central nervous stimulant, have been investigated by Ginzel[1] in experimental animals Respiratory enhancement occurs with single intravenous doses of approximately 2 mg /kg, and convulsive and lethal effects occur with doses of 17 mg /kg reflecting a large margin of safety The drug was also found to possess moderate vasopressor properties The effects of vanillic diethylamide given intravenously usually occur within one minute of administration and persist for about 10 minutes No evidence of toxicity in mice was detected with daily intraperitoneal administration

Bernstine[2] has employed vanillic diethylamide as an analeptic agent in eight cases of barbiturate poisoning Standardization of dosage is not yet possible, however, the author[2] recommended a dose of 10 mg /kg injected intravenously and repeated at 10-minute intervals until corneal reflex is obtained, and thereafter at hourly intervals until signs of overdosage occur It is estimated that our patient received about 1,400 mg (20 mg /kg) of vanillic diethylamide over a six-and-a-half-hour period

Respiratory stimulation with vanillic diethylamide has been observed in adult patients suffering from cerebral hemorrhage, congestive heart failure, and chronic obstructive pulmonary emphysema[3] With overdosage, flushing, sneezing, coughing, excitation, diaphoresis, generalized pruritus, and muscular twitching may occur These manifestations are readily controlled by slowing the rate of administration of the agent and are completely reversible, with no evident sequelae

The present case is of considerable interest because of the prolonged duration of apnea prior to therapy and the rapid restoration of spontaneous respiration with appropriate dosage

Deserving of comment also is the origin of the muscular twitchings in the present case In view of Bernstine's[2] experience and those of one of us,[3] 1,400 mg of vanillic diethylamide given over a six-and-one-half-hour period should not be considered excessive However, in view of the investigations previously cited, increased cerebral and spinal excitability may occur with increasing dosage[3]

There remains the possibility that cerebral edema may have been responsible for the tremors The fact that these phenomena occurred in the presence of an elevated cerebrospinal fluid pressure and subsided when pressure was reduced lends some support to this hypothesis The cerebral edema may have been barbiturate-induced[4] or secondary to decreased venous return as a result of continuous assisted breathing therapy[5] Acute and chronic toxicity studies have failed to demonstrate the presence of cerebral edema occurring as a consequence of vanillic diethylamide administration[6]

Summary

Prompt restoration of spontaneous restorations in a patient with prolonged apnea secondary to barbiturate intoxication was achieved with vanillic diethylamide (Emivan), a new respiratory stimulant

The vanillic diethylamide used in this study was supplied as Emivan by the U S Vitamin and Pharmaceutical Corporation, New York City

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6 Research Division, U S Vitamin and Pharmaceutical Corporation Personal communication to the author

CHARCOT AND FAITH—Charcot cited the ancient pilgrimages of history, the sanctuaries of Egypt, the Asclepieion of Athens, the temple of Aesculapius, and the religious tombs He showed how similar all these pilgrimages were, having the same rhythmic preparations for the cure during which the power of faith healing became more and more exhalted by autosuggestion and by the contagion of mass psychology—G Guillain J-M Charcot, 1825-1893 His Life—His Work, edited and translated by P Bailey, New York, Paul B Hoeber, Inc, 1959

JAMA, Oct 15, 1960

Spontaneous Fatal Gas Gangrene Septicemia

Ernest E Smucker, M D, Stephen E Reid, M D, and
Harry B Harding, M D, Evanston, Ill

Only three instances of spontaneous gas gangrene septicemia originating within the abdomen were found in a review of the literature[1] The purpose of this contribution is to report an additional case and to show the problems in its differential diagnosis The clostridia responsible for clinical gas gangrene may be present within the body and cause no clinical manifestations Such organisms are regularly ingested and pass through the intestinal tract, producing no clinical evidence of the disease, or, the organism may be cultured in a wound and produce no clinical evidence of its presence, or, it may be found in a wound having an anaerobic environment partly created by necrotic muscle and produce clinical evidence of gas gangrene, which remains localized for a time but finally spreads along muscle planes, causing an overwhelming toxemia, shock, and eventually death Blood cultures may reveal clostridia without the clinical manifestations or evidence of septicemia, or, a frank septicemia, with its morbid condition, may complicate a localized gas gangrene infection, resulting in widespread involvement of the body, or gas gangrene septicemia may develop with no apparent focus

Report of a Case

An 86-year-old woman who entered the Evanston Hospital at 11 00 a m on Dec 31, 1957, had noted fatigue for one week, and on the evening before admission had developed anorexia and nausea and had had several soft brown stools During the night pain developed in the right lower quadrant of her abdomen, associated with chills and a temperature of 102 6 F (39 2 C) The patient attributed an aching pain in the right hip on the morning of admission to arthritis, she had experienced the pain in both hips on previous occasions There had been no weight loss, melena, or change in bowel habit

On examination the patient was alert and cooperative The blood pressure was 140/65 mm Hg, pulse rate 100 per minute, respirations 24 per minute, and temperature 102 0 F (38 9 C) An easily palpable, tender, firm, fixed mass was found in the right lower quadrant Although bowel sounds were absent, there was no distention or rigidity, but there were fulness and tenderness on the right on rectal examination

The hemoglobin level was 14 9 Gm %, and the white blood cell count 13,050 per cubic millimeter, with 73% segmented cells, 13% band forms, 10% lymphocytes, and 4% monocytes The urine showed no abnormal findings A plain x-ray film of the abdomen contributed no further information The clinical impression was that of an appendiceal abscess, although the possibility of a carcinoma of the cecum was considered

When the abdomen was opened through a right paramedian incision at 1 15 p m, acute appendicitis and a large carcinoma of the cecum were found A right hemicolectomy was performed, with resection of about 1 ft of the terminal ileum, the appendix, the cecum, the ascending colon, and the right side of the transverse colon with the contiguous mesentery No changes in the retroperitoneal tissues were noted An end-to-end ileotransverse colestomy was made The patient tolerated the procedure well and had no fall in blood pressure When the patient left the operating room at 3 30 p m, her condition was excellent At 4 30 p m she complained bitterly of pain in the right hip At 4 45 p m the blood pressure dropped suddenly to 60/40 mm Hg, with a pulse rate of 120 per minute It became immediately apparent that the right thigh and buttocks were swelling markedly and had become cool and pale, with a bruised appearance Since a vascular accident was considered to account for the swelling of the thigh, this extremity was wrapped in an Ace bandage The dorsalis pedis pulses were, however, equal bilaterally When the swelling and discoloration of the thigh spread to the loin, the patient was turned on the left side and the bandage was removed It was found that the skin was covered with massive sanguineous blebs which coalesced and were easily broken, and that the epidermis appeared to be slipping away from its deeper layers At this point, at 7 10 p m, the patient went into deep shock and was pronounced dead, less than three hours after the onset of the severe pain in the hip Within a few hours after death, in spite of refrigeration, the patient's entire body had swollen to such an enormous proportion that the undertaker thought the body had remained without refrigeration for days

From the departments of surgery and bacteriology, Evanston Hospital, and Northwestern University Medical School

Reports on Surgical Specimen and Autopsy

Gross Description—The specimen consisted of the distal end of the ileum, appendix, cecum, and ascending colon The cecum contained a protuberant tumor which almost filled the entire lumen of the cecum and measured 3 5 cm in diameter The mucosal surface of the tumor was necrotic and ulcerated, but the serosal surface of the cecum was smooth

Microscopic Description of Specimen—The cecum revealed tumor infiltration through the entire thickness of the wall to the serosa Most of the tumor was necrotic, but solid masses of the irregular glandular structures of pleomorphic large cells with hyperchromatic nuclei and frequent mitoses were seen There was a marked acute inflammatory cell infiltration Ten of 11 lymph nodes showed tumor metastasis The appendix showed marked infiltration of acute inflammatory cells in the serosa and subserosa

Diagnosis—The diagnosis was (1) carcinoma of cecum, with metastasis to 10 of 11 lymph nodes, and (2) acute periappendicitis

Autopsy Report—The body was that of a well-developed, elderly woman of about 140 lb (63 5 kg) in weight The skin of the face and head was dark bluish-red, and noticeably swollen and crepitant due to marked subcutaneous emphysema The neck, upper extremities, chest, and anterior part of the abdomen showed that the same process had been at work The breasts were markedly projecting, in spite of the recumbent position of the patient The entire abdominal wall was severely swollen and markedly crepitant Pressure on it caused gas bubbles to pour out of the everted and swollen edges of the surgical wound

In the entire pubic region, external genitalia, and the right inguinal region, a massive subcutaneous hematoma-like lesion extended laterally and posteriorly to the right buttock, on which there were several large thin-walled blisters measuring 10 by 15 cm and filled with blood-tinged fluid The right thigh down to the knee and also an area down the right leg posteriorly showed marked swelling due to a massive subcutaneous hematoma

Sections of all organs contained numerous large vacuoles, which represented gas produced by the clostridial infection In one section of large intestine removed from the area contiguous to the previously removed carcinoma, the lumen and the wall contained tremendous numbers of large bacilli that stained basophilically with hematoxylin There were also many foci of hemorrhage in the submucosa

Specimens of liver, muscle, cardiac blood, and bloody fluid aspirated from the right thigh were submitted for bacteriological study A gram-positive, plump, rod-shaped organism was isolated which produced gaseous lesions in animals, fermented lactose and sucrose but not salicin, gave a positive Nagler reaction, and was neutralized in vitro and in vivo by polyvalent gas gangrene antitoxin (Wyeth method) The organism was considered to be *Clostridium perfringens* (Welch's bacillus) since *Cl novyi* does not ferment lactose or sucrose and *Cl septicum* does not ferment sucrose

Comment

Diseases Associated with Gas Gangrene—Probably the most frequent disease associated with gas gangrene is carcinoma Diverticulitis has been reported as the source of intra-abdominal gas gangrene A noteworthy feature in these two conditions is the tendency of the disease process to spread retroperitoneally down the psoas and lumbar muscles and to be manifested early by symptoms in the thigh and the inguinal and gluteal areas Instances of small bowel obstruction with gas gangrene [2] and of gas gangrene enterocolitis [1a] have been reported

Sites of Origin of Gas Gangrene—Capiello, Liccese, and Crecca [3] reviewed 25 cases of gas gangrene of the appendix with a mortality of 62 5% Cultures taken in a series of appendectomy specimens with no evidence of clinical gas gangrene were positive for clostridia in 90%, whether the appendix was acutely inflamed or not The rectum apparently is rarely the site for gas gangrene We found reports of only six cases of pericolitis with ischiorectal abscess complicated by gas gangrene [4] Of these patients, three (the more recently reported) recovered with adequate treatment Gas gangrene after perforation of a peptic ulcer is rare but has been reported It is in the gallbladder that the gas-forming organism is most likely to be detected preoperatively If gas is detected in the gallbladder on roentgenographic examination, a gas-forming organism is to be considered the most likely, but not the only, possibility In a review of 50 cases of pneumocholecystitis from the literature, 40% were listed as due to clostridia, of which *Cl perfringens* (Welch's bacillus) was the most frequently isolated organism [5] Gas gangrene infection of the uterus has been reported after stillbirth, prolonged labor, abortion, and tubal pregnancy

Diagnostic Criteria of Gas Gangrene—It should be strongly emphasized that the diagnosis of gas gangrene must be made primarily on clinical grounds The demonstration of one of the pathogenic clostridia in a wound is not in itself pathognomonic We support the emphasis of Altemeier and co-authors [6] on the following points in its recognition (1) a variable incubation period, from two hours to many days, (2) pain out of proportion to physical signs, (3) appearance of white, shiny, tense skin, later dusky in color, followed by bloody bullae and usually diffuse swelling of

the part, (4) a rapid and feeble pulse, with shock and a sudden drop in blood pressure (60 mm Hg or less), (5) a peculiar grayish pallor, weakness, and sweating, (6) temperature, either subnormal or up to as high as 107 0 F (41 7 C), and (7) clear sensorium until the terminal state

Role of Toxins—The clostridia which cause gas gangrene infections are obligate anaerobes and will produce their toxins only under conditions of markedly reduced oxygen tension The toxin thus produced, which is a lecithinase, breaks down cells containing lecithin and interferes with cell metabolism Thus, it causes a lysis—first of the platelets, then of the erythrocytes and leukocytes—producing a drop in the hemoglobin level and a hemorrhagic diathesis[7] The broken-down cells provide further nutrient for the micro-organisms The K-toxin (collagenase, kappa toxin) breaks down collagen barriers to the spread of the organism and destroys the supporting reticulum around blood vessels, thus further interfering with the blood supply The muscle is torn apart by the action of accumulated gas resulting from the anaerobic glycolysis of muscle carbohydrate The U-toxin (hyaluronidase, unidasa) assists the spread of the micro-organism by breaking the interstitial ground substance, it also provides more fermentable carbohydrate in the form of by-products of hyaluronic acid Though other toxins are produced, they do not play a major role

Treatment

The various methods of treatment recommended center about the following regimen 1 Local treatment consists of surgical débridement, with maximum possible exposure, application of gauze dressings of a thin paste of hydrogen peroxide and zinc peroxide, and immobilization 2 Gas gangrene antitoxin often has been used—4 vials given intravenously at once, followed by 1 or 2 vials every six hours, until the patient's condition is markedly improved (Each vial contains 10,000 units of *Cl perfringens*, 10,000 uni[illegible] of *Cl septicum*, and 3,000 units of *Cl novyi* and antitoxins) This method of treatment should not be abandoned, since it has not been established that it is of no value 3 Supportive measures, including those combating shock and acidosis, are applied, several blood transfusions daily have been required 4 Antibiotics given are (*a*) penicillin, 10 million units per day, intravenously, (*b*) tetracycline (Achromycin), 6 Gm per day intravenously, with a daily decrease in dosage, or (*c*) chloramphenicol (Chloromycetin), 1 or 2 Gm intravenously every six hours, with rapid reduction in dosage In desperate situations, all three antibiotics should be used simultaneously

Conclusions

When malignancy occurs in the abdomen and surgical intervention is necessary, it must be remembered that the clostridia are (1) inhabitants of the gastrointestinal tract and (2) may produce gas gangrene infection To treat gas gangrene infection successfully, it must be detected early and vigorous therapeutic measures must be applied

636 Church St (Dr Reid)

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GOVERNMENT SERVICES

ARMY

General Cooney Retired—Major General James P Cooney, the Army's top expert on atomic medicine, retired in August after more than 33 years in the Medical Corps His last duty assignment was as Chief Surgeon, Headquarters U S Army Europe, in Heidelberg, Germany He has accepted the position of vice president for medical affairs of the American Cancer Society

Personal—Colonel Sterrett E Dietrich was named Fifth Army Surgeon He succeeds Colonel George E Leone, who retired in June Colonel Dietrich was formerly Surgeon, U S Army, Alaska

NAVY

Foreign Medical Officers Attending Courses—A group of 22 foreign armed forces medical officers are attending courses in Naval Medical Management and Naval Preventive Medicine at the Naval Medical School, National Naval Medical Center, Bethesda, Md The courses, which convened in August, will be conducted concurrently for a period of ten weeks The purpose of these courses is to prepare specially selected foreign officers of friendly countries for higher command responsibilities in their own navies and to familiarize them with U S Navy methods, practices, and doctrines

The Naval Medical Management course is designed to acquaint senior medical officers with the methods used by the U S Naval Medical Department in hospital administration, including the selection and training of personnel, maintenance of hospital records, outpatient care, and hospital food operations

The Naval Preventive Medicine course is designed to familiarize junior medical officers with the latest global concepts of military and civilian preventive medicine practices Some of the subjects covered in this course are tropical medicine, cold weather medicine, nuclear medicine, and radioisotopes

PUBLIC HEALTH SERVICE

New Divisions—Four new divisions were established in the Bureau of State Services Air pollution work, formerly divided into medical and engineering units, will be handled by a Division of Air Pollution Vernon G MacKenzie, a career engineer officer of the Service who has been engaged in air pollution control for the past ten years, is chief of the new division Dr Richard A Prindle, a physician who has specialized in the health aspects of air pollution and has been chief of the service's air-pollution medical program for the past two years, is the deputy chief The staff will include physicians, sanitary engineers, chemists, and other scientists and professional specialists who have previously been working in separate medical and engineering units of the service

Occupational health activities are being concentrated in a new Division of Occupational Health, with Dr Harold J Magnuson as its chief Dr Magnuson has been directing the service's occupational health programs for the past four years By raising the program to division status, it will be possible to increase the funds and manpower devoted to research on new chemicals and other industrial products and to develop better safeguards for the workers who process them Since many health problems in the work environment are similar to those in the general environment, this division will also contribute to the effort to protect the public from new types of environmental health hazards

A Division of Nursing merges two former divisions the Division of Public Health Nursing, which operated as a part of the Bureau of State Services, and the Division of Nursing Resources, which operated as a part of the Bureau of Medical Resources A Division of Dental Public Health and Resources merges the former State Services Division of Dental Public Health and the former Medical Service's Division of Dental Resources All four new divisions began their operations Sept 1

Measurement of Radioactivity—The number of sampling stations for measuring radioactivity in milk has been increased from 10 to 59 Coverage is now almost nationwide with at least one sampling station in each of 47 states and the District of Columbia Last month the network was extended to Puerto Rico Arrangements with the three remaining states—Alabama, North Dakota, and South Dakota—are being discussed with the expectation that all 50 states may be covered by the network in the near future

When the milk-sampling network was established in 1957, its purpose was to explore the most effective methods for measuring radiation levels in milk Milk was chosen because it is among the most important elements in the diet and is constantly available at all seasons and in all climates A primary objective in the beginning was to develop and simplify methods of collecting and making radiochemical analyses of milk Now that better and more economical methods have been developed, it is practical to extend the network The need to do so became evident when marked differences in radiation levels were found in different parts of the country, indicating that more comprehensive monitoring would be required to assess the radiation exposure of people in all parts of the country

State and local health departments or milk sanitation officials collect samples from major milksheds in accordance with a uniform system and

forward them to the regional laboratory at Las Vegas, Nev, or the one at Montgomery, Ala, for analysis of radioactive content The Montgomery laboratory processes samples from 30 states east of the Mississippi, and the Las Vegas laboratory processes samples from states west of the Mississippi For the present, these laboratories will test only for strontium-90 and cesium-137 Until these laboratories are equipped to test for other radioactive elements, the laboratory at Cincinnati will continue, as in the past, to analyze samples for iodine-131, strontium-89, and barium-140

Results of the milk tests are tabulated and published in a monthly technical journal, *Radiological Health Data*, published by the Public Health Service The journal is distributed to scientists, official health agencies, interested members of Congress, and the press The results of the first analyses made on samples received from the expanded network will appear in the September issue of the journal

Cancer Chemotherapy—The proceedings of the Conference on Experimental Clinical Cancer Chemotherapy have been published by the National Cancer Institute The Conference assembled in Washington, D C, in November and was sponsored by the Institute's Cancer Chemotherapy National Service Center Published as National Cancer Institute Monograph No 3, the proceedings consist chiefly of panel discussions on such subjects as seeking new structures of chemotherapeutic agents, design and conduct of clinical investigations, use of drugs in conjunction with surgical treatment for cancer, and chemotherapy of specific forms of malignant disease such as leukemia or cancer of the breast and lung

In addition, the monograph includes papers on several key facts of cancer chemotherapy research Dr I S Ravdin, of the University of Pennsylvania, presents a general view of co-operative clinical research, Dr Bernard R Baker, of the Stanford Research Institute, discusses chemical structure as related to anticancer action, and Dr C Chester Stock, of the Sloan-Kettering Institute, reviews the field of biological screening for anticancer activity The National Cancer Institute Monograph No 3 is available from the Superintendent of Documents, U S Government Printing Office, Washington 25, D C The single copy price is $2 00

Personal—Dr G Milton Shy, who has been clinical director of the National Institute of Neurological Diseases and Blindness (NINDB) for the past seven years, has been appointed to the newly created position of NINDB associate director in charge of intramural research In this capacity he will be responsible for developing the clinical and basic research program at the Institute's laboratories in Bethesda He will serve in a major advisory role to NINDB Director Dr Richard L Masland on the Institute's total program and will represent NINDB on the Scientific Directors' staff of the National Institutes of Health—Dr Nathan B Eddy, research pharmacologist at the National Institutes of Health for the past 21 years, retired from the U S Public Health Service in August at the age of 70 He has been chief of the Section on Analgesics, Laboratory of Chemistry at the National Institutes of Arthritis and Metabolic Diseases, since 1951 He is a recognized authority on drug addiction and analgesics

VETERANS ADMINISTRATION

Prize-Winning Exhibits—The three top awards for scientific exhibits at the Third International Congress of Physical Medicine and Rehabilitation, held in Washington, D C, in August, went to Veterans Administration physicians The highest award, the gold medal, was won by Dr W T Liberson, of the Hines, Ill, VA hospital, and H J Holmquest, of Chicago, for their exhibit, "Electrophysiological Brace for Foot Drop in Hemiplegics"

The second award, the silver medal, went to Dr Alfred Ebel, chief of physical medicine and rehabilitation at the Bronx, N Y, VA hospital, Dr Nicholas Panin, assistant chief of physical medicine and rehabilitation at the East Orange, N J, VA hospital, and Dr Milton Holtzman, of Welfare Island, New York City, for their exhibit, "Anatomical Localization of Common Vascular Brain Syndromes"

The third award, the bronze medal, went to Dr Harry T Zankel, chief of physical medicine and rehabilitation at the Durham, N C, VA hospital, for his exhibit, "Stimulation Assistive Exercise in Hemiplegia"

Personal—Dr Samuel C Kaim was named chief of psychiatric research in the central office in Washington He was formerly chief of inpatient psychiatry and neurology at the Coral Gables, Fla, VA hospital In his new post, he will co-ordinate the VA's large-scale co-operative research on newer drugs in the treatment of mental illness

NATIONAL BUREAU OF STANDARDS

Aldehydes in the Atmosphere—A rapid, accurate colorimetric method for detecting and measuring minute quantities of aldehydes in air has been developed by the bureau The method involves the absorption of small quantities of aldehyde, ordinarily too widely dispersed to measure, onto the surface of silica gel To determine the amount of gas absorbed, the silica gel layer is treated with a solution of *p*-phenylenediamine hydrochloride and hydrogen peroxide The resulting color change is indicative of the original aldehyde concentration present in the air Rapid procedures for determining aldehydes have become important for studies on air-pollution control

DEATHS

Adams, Benjamin Dyer, Burlington, Vt, University of Vermont College of Medicine,, Burlington, 1908, fellow of the American College of Surgeons, veteran of World War I, associated with the Mary Fletcher Hospital, died July 21, aged 81, of cerebral vascular accident

Armstrong, Arthur Chester, Menlo Park, Calif, University of Toronto Faculty of Medicine, Toronto, Ont, Canada, 1911, received the Croix de Guerre with palm for service during World War I, also awarded the Military Cross, died July 8, aged 72, of myocardial infarction

Arnold, Ralph Aranovitz Ⓜ Durham, N C, born in Rochester, N Y, Dec 4, 1910, University of Buffalo School of Medicine, 1936, interned at the Duke Hospital, where he served a residency and where he was a staff member, specialist certified by the American Board of Opthalmology and the American Board of Otolaryngology, past-president of the North Carolina Eye, Ear, Nose and Throat Society, member of the American Academy of Ophthalmology and Otolaryngology and the American Laryngological, Rhinological and Otological Society, veteran of World War II, associate professor of otolaryngology and ophthalmology at Duke University School of Medicine, a consultant to the Veterans Administration Hospital, died in Mount Sinai Hospital, New York City, July 17, aged 49, of coronary thrombosis

Bower, Albert Gordon, Pasadena, Calif, born in Salt Lake City Feb 5, 1890, Rush Medical College, Chicago, 1916, specialist certified by the American Board of Internal Medicine, past-president of the Hollywood Academy of Medicine, fellow of the American College of Physicians and the American Association for the Advancement of Science, served on the faculty of the University of Southern California School of Medicine in Los Angeles and the College of Medical Evangelists in Loma Linda and Los Angeles, chief of staff, communicable disease section, Los Angeles County General Hospital, consultant, St Joseph's Hospital in Burbank, Memorial Hospital and the Glendale Sanitarium and Hospital in Glendale, Presbyterian Hospital–Olmsted Memorial, Los Angeles, St Luke Hospital and Collis P and Howard Huntington Memorial Hospital, joint author of a book with Mrs Edith B Pilant, registered nurse, titled, "Communicable Diseases for Nurses," now in its eighth edition, editor of "The Diagnosis and Treatment of the Acute Phase of Poliomyelitis and Its Complications", died Aug 2, aged 70, of coronary disease

Ⓜ Indicates Member of the American Medical Association.

Boyle, Joseph Thomas, Barnstable, Mass, Kansas City (Mo) University of Physicians and Surgeons, 1941, an associate medical examiner for Barnstable County, staff member of the Barnstable County House of Correction, medical officer for the Massachusetts Maritime Academy at Buzzards Bay, at one time on the staff of the federal penitentiary hospital in Ossining, N Y, died July 18, aged 55, of coronary thrombosis

Brodhead, William Francis, New York City, New York Homeopathic Medical College and Flower Hospital, New York City, 1911, veteran of World War I, died July 23, aged 72, of heart failure

Bryan, Francis Fields Jr, Georgetown, Ky, Hospital College of Medicine, Louisville, 1900, died June 14, aged 82, of congestive heart failure and arteriosclerotic heart disease

Bundesen, Herman Niels Ⓜ for many years president of the Chicago Board of Health, died in the Chicago Wesley Memorial Hospital Aug 25, aged 78, of carcinoma of the pancreas Dr Bundesen was born in Berlin, Germany, April 27, 1882 He graduated from Northwestern University Medical School in Chicago in 1909 and took a post-graduate course at the U S Army Medical School at Washington, D C, in 1911 From 1900 to 1908 he served with the First Regiment of the Illinois National Guard and from 1909 to 1911 he was a first lieutenant in the medical corps of the United States Army, specializing in epidemic work During World War I Dr Bundesen was a member of the Volunteer Medical Service Corps examining soldiers for the draft and rendering other needed service He was epidemiologist for the Chicago Health Department from 1914 to 1922, when he was appointed commissioner of health for the City of Chicago, serving in this position until 1927, when he became director of health of the Sanitary District of Chicago until 1928 In 1927 he was lauded unanimously in a formal resolution by the City Council of Chicago for his record as commissioner of health From 1928 to 1931 he was coroner of Cook County, serving until 1931, when he became president of the Chicago Board of Health In 1926 Dr Bundesen became professorial lecturer on public health administration at the University of Chicago One of his first achievements was virtual eradication of bone tuberculosis transmitted in the milk of diseased cows He was honorary vice-president of the Child Conservation League of America, fellow of the American College of Physicians, member of the Institute of Medicine of Chicago, the American Public Health Association, of which he was a mem-

ber of the board of governors, vice-president in 1926-1927, and in 1927 president, American College of Preventive Medicine, American Association of Public Health Physicians, American Medical Writers' Association, Association of Military Surgeons of the United States, and other societies, and corresponding member of the Danish Dermatological Society, Copenhagen, Denmark In 1956 Dr Bundesen received an award for distinguished service from the Illinois division of the American Cancer Society and in 1926 he received the Chicago Daily News annual $1,000 award for the "greatest individual service to humanity by an individual in the Chicago Metropolitan Area" He was a regional consultant of contagious diseases for the U S Veterans Bureau, a member of the executive committee of the Gorgas Memorial Institute of Tropical and Preventive Medicine and a past-president of the Morals Commission of Chicago He was a specialist certified by the American Board of Preventive Medicine In 1933 he was appointed senior surgeon for the U S Public Health Service with the rank of lieutenant colonel In 1922 he became trustee of the City of Chicago Tuberculosis Sanitarium, where in 1947 he became vice-president of the board of directors, and vice-president from 1947 to 1953 Since 1915 he was consulting surgeon for the Illinois Central Railroad Dr Bundensen was health editor of the *Chicago Daily News, Chicago Evening American*, and syndicated newspapers and was the author of numerous publications in his field In 1936 he was a candidate for the Democratic nomination for governor of Illinois He was awarded an honorary degree of doctor of science in 1927 from Northwestern University for "accomplishments in sanitation, hygiene and education unequaled in the history of Chicago," and in 1951 received its Centennial Award His most recent campaign was for complete inoculation against poliomyelitis during a 1956 epidemic

Bulluck, George W, Rocky Mount, N C, Leonard Medical College, Medical Department Shaw University, Raleigh, 1912, died Aug 2, aged 74, of chronic congestive heart failure

Burns, John Alexander, Wilson, N Y, Kentucky University Medical Department, Louisville, 1903, on the staff of the Lockport (N Y) Memorial Hospital and the Niagara Falls Memorial Hospital in Niagara Falls, died in Fort Erie, Ont, Aug 1, aged 80, of coronary thrombosis

Byers, Bert H, Manchester, Iowa, Drake University College of Medicine, Des Moines, 1911, for many years city health officer, member of the Delaware County Insane Commission, died July 23, aged 85, of adenocarcinoma of the prostate with metastasis

Cavill, Francis Tone, Atlantic City, N J, Medico Chirurgical College of Philadelphia, 1903, died in the Atlantic City Hospital July 16, aged 80, of cerebral thrombosis and arteriosclerotic heart disease

Christofferson, Albert Marion, Waupaca, Wis, Barnes Medical College, St Louis, 1909, died in Colby Aug 2, aged 75, of coronary occlusion

Cobb, Leon Frederick, Pontiac, Mich, Detroit College of Medicine and Surgery, 1921, member of the American Academy of General Practice, past-president of the Oakland County Medical Society, associated with the Pontiac General Hospital, where he was chief of staff, died July 28, aged 63, of coronary thrombosis

Collins, Clinton Darwin, Fresno, Calif, Cooper Medical College, San Francisco, 1911, past-president of the Fresno County Medical Society, veteran of World War I, served as county physician, associated with the Fresno Community Hospital and the General Hospital of Fresno County, died in Carmel July 24, aged 75, of uremia

de Lorimier, Alfred Alexandre Ⓜ Colonel, U S Army, retired, San Francisco, born in Fort Benton, Mont, Oct 15, 1901, University of California School of Medicine, San Francisco, 1927, entered the U S Army June 6, 1929, veteran of World War II and was awarded the Legion of Merit for "service as director of the department of roentgenology, Army Medical School, Army Medical Center, Washington, D C, from Sept 8, 1939 to Oct 1, 1942", retired Jan 13, 1947, received the Army Commendation Ribbon, American Campaign Medal, American Defense Service Medal, World War II Victory Medal, and the Asiatic Pacific Campaign Medal, specialist certified by the American Board of Radiology, member of the American Rheumatism Association, American Roentgen Ray Society, Radiological Society of North America, and the American College of Radiology, consultant in roentgenology at the Letterman Army Hospital, where he died July 19, aged 58, of carcinoma of the prostate with generalized metastases

Fell, Egbert W, Rockford, Ill, born on Jan 16, 1878, Northwestern University Medical School, Chicago, 1903, member of the American Psychiatric Association, veteran of World War I, served as psychiatrist for Winnebago County court and the board of education of Rockford, formerly associated with the State Institution for Feeble Minded in Medical Lake, Wash, Elgin (Ill) State Hospital, and the Boston Psychopathic Hospital, at one time medical director of the Cincinnati Sanitarium, served on the staff of the Wilgus Sanitarium, on the staffs of the Rockford Memorial, Swedish-American, and St Anthony hospitals, died July 16, aged 82, of myocardial infarction

Fielding-Reid, Francis, Baltimore, University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, 1930, veteran of World War II, died in Washington, D C, July 21, aged 68, of acute congestive failure

Gilpatrick, Leon Southard, Spokane, Wash, Harvard Medical School, Boston, 1915, past-president of the Pacific Northwest Medical Association and of the Spokane County Society of Internal Medicine, died in the Sacred Heart Hospital July 13, aged 74, of pulmonary emphysema and fibrosis

Gottshall Snively, Florence M, Waynesboro, Pa, Woman's Medical College of Pennsylvania, Philadelphia, 1913, died in Sacramento, Calif, July 2, aged 78, of aortic stenosis

Graf, Joseph Peter, Chicago, Chicago Medical School, 1918, member of the American Academy of General Practice, veteran of World War I, died in St Bernard's Hospital July 24, aged 70, of acute myocardial infarction and arteriosclerotic heart disease

Greene, Charles W, Harriman, Tenn, University of Nashville Medical Department, 1893, died in the Harriman Hospital July 11, aged 95, of acute pulmonary edema

Gregory, Clyde Alvin, Pasadena, Calif, College of Medical Evangelists, Loma Linda and Los Angeles, 1923, interned at General Hospital of Fresno County in Fresno and served a residency at St Helena Sanitarium and Hospital in Sanitarium, died in Anderson July 8, aged 69, of coronary thrombosis

Gregory, Lemuel L, Centenary, S C, Medical College of South Carolina, Charleston, 1900, died in the Sunny Acres Rest Home in Dillon July 16, aged 87, of bronchopneumonia and arteriosclerosis

Griffin, Howard Elihu, Graham, Texas, Medical Department of Tulane University of Louisiana, New Orleans, 1907, past vice-president of the Texas Medical Association, past-president of the Northwest Texas Medical Society, formerly practiced in Ennis, and was secretary-treasurer of the Ellis County Medical Society, member of the House of Delegates of the American Medical Association in 1946, 1947, and 1948, an examiner of the Young County Draft Board during World Wars I and II, a charter member and first president of the Graham Rotary Club, on the staff of the Graham General Hospital, where he died July 10, aged 79, of coronary thrombosis

Gross, Charles Monroe, Cullman, Ala, University of Alabama School of Medicine, Mobile, 1908, on the staff of the Cullman Hospital, where he died July 8, aged 77, of hepatic failure, prostatic neoplasm, and nephrosis

Hamlon, John Spencer Ⓜ Fergus Falls, Minn, University of Minnesota Medical School, Minneapolis, 1936, interned at Swedish Hospital in Minneapolis, veteran of World War II, awarded the victory medal with four bronze stars, the American Defense ribbon, and the combat medical badge, associated with the Fergus Falls State Hospital, died in the Lake Region Hospital July 18, aged 50, of coronary thrombosis

Hegner, Casper Frank Ⓜ Denver, born in Cincinnati April 10, 1879, Medical College of Ohio, Cincinnati, 1902, member of the founders group of the American Board of Surgery, at one time assistant professor of surgery at the University of Colorado School of Medicine, past-president of the Colorado State Medical Society and the Denver Medical Society, for ten years practiced in Cincinnati, member of the American Surgical Association, Western Surgical Association, of which he was past-president, International Society of Surgery—American Branch, and the American Association for the Surgery of Trauma, of which he was past vice-president, fellow of the International College of Surgeons and the American College of Surgeons, formerly on the staffs of the Colorado General, St Luke's, St Anthony, Presbyterian, and Mercy hospitals in Denver and the Swedish National Sanatorium in Englewood, died July 14, aged 81, of dissecting aneurysm of the abdominal aorta, with retroperitoneal hemorrhage and generalized arteriosclerosis

Holleran, John Henry, Wakefield, Mass, McGill University Faculty of Medicine, Montreal, Que, Canada, 1932, director of the Wakefield Cooperative Bank, senior surgeon at the Melrose-Wakefield Hospital, on the courtesy staffs of the New England Sanatorium and Hospital, Stoneham, and the Winchester (Mass) Hospital, where he died July 17, aged 55, of cerebral hemorrhage

Holloway, Paul Dickson, Collins, Miss, Tulane University School of Medicine, New Orleans, 1919, formerly associated with the U S Public Health Service, died in the Covington County Hospital July 16, aged 67, of cerebral hemorrhage due to hypertension and arteriosclerosis

Houston, Bessie Angela Bober, Farmington, Me, Dalhousie University Faculty of Medicine, Halifax, N S, Canada, 1910, specialist certified by the American Board of Psychiatry and Neurology, for many years associated with the Northampton (Mass) State Hospital, died in the Franklin County Memorial Hospital, July 5, aged 71, of chronic myelogenous leukemia

Ingraham, Clarence Bancroft Ⓜ Denver, born July 19, 1879, Johns Hopkins University School of Medicine, Baltimore, 1906, specialist certified by the American Board of Obstetrics and Gynecology,

member of the American Gynecological Society, Western Surgical Association, and the Central Association of Obstetricians and Gynecologists, fellow of the American College of Surgeons, for many years professor and head of the department of obstetrics and gynecology at the University of Colorado School of Medicine, where he was professor emeritus, veteran of World War I, died July 20, aged 80, of spontaneous subarachnoid hemorrhage and generalized arteriosclerosis

Jeffries, L Albert, Jennings, Kan, Ensworth Medical College, St Joseph, Mo, 1907, died in the Nazareth Sanatorium in Alameda, N M, July 9, aged 82, of chronic myocarditis

Kane, Peter, Boston, Maryland Medical College, Baltimore, 1910, also an attorney, died in the Lemuel Shattuck Hospital July 13, aged 70, of bronchopneumonia and parkinsonism

Kelly, Otis Francis Ⓜ Cochituate, Mass, Harvard Medical School, Boston, 1920, member of the American Psychiatric Association, also a priest, served on the staff of the Danvers State Hospital, Hathorne, died in the Massachusetts General Hospital, Boston, June 29, aged 63, of injuries received in an automobile accident

Kleinschmidt, Harry Edwin, Mystic, Conn, Washington University School of Medicine, St Louis, 1909, veteran of World War I, served as director of health education service, National Tuberculosis Association in New York, formerly chief of the division of child hygiene of the Ohio Department of Health at Columbus, on the staff of the American Social Hygiene Association, and executive secretary of the Toledo (Ohio) Public Health Association, in 1942 appointed director of medical and health service of the North Atlantic Area, American Red Cross, with headquarters in New York, died July 24, aged 75, of coronary occlusion and arteriosclerotic heart disease

Levinsohn, Herman Ⓜ New York City, Long Island College Hospital, Brooklyn, 1905, also a graduate in pharmacy, died in the Manhattan General Hospital July 24, aged 80, of coronary thrombosis and coronary heart disease

Lyon, Arminus Blair, Ulster, Pa, College of Physicians and Surgeons, Baltimore, 1906, served on the staff of the Tioga County General Hospital in Waverly, N Y, formerly county coroner, for many years chairman of the school board, died July 11, aged 79, of arteriosclerotic heart disease

MacMahon, Harry J, East Aurora, N Y, University of Buffalo School of Medicine, 1913, fellow of the International College of Surgeons, during World Wars I and II a member of the East Aurora and North Collins Selective Service Boards, a member of the surgical staffs of Sisters of Charity Hospital and Mercy Hospital in Buffalo, died July 20, aged 72, of coronary occlusion

McGowan, Joseph Francis, Asheville, N C, born in Barnesboro, Pa, July 1, 1903, University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, 1929, specialist certified by the American Board of Otolaryngology, member of the American Academy of Ophthalmology and Otolaryngology, American Otorhinologic Society for Plastic Surgery, and the American College of Allergists, served as president of the Lions Club, associated with Mission Hospital, Aston Park Hospital, and St Joseph's Hospital, where he died July 17, aged 57, of cerebral hemorrhage

Marland, Jackson Thorne, Washington, D C, Georgetown University School of Medicine, Washington, D C, 1947, certified by the National Board of Medical Examiners, interned at the St Luke's Hospital in New York City, served a residency at the Georgetown University Hospital and the Gallinger Municipal Hospital, on the staffs of the Sibley Hospital, Washington Sanitarium and Hospital, and the Washington Medical Center, where he died July 20, aged 36, of endocarditis and lung infarcts

Meigher, Stephen Christopher Ⓜ Schenectady, N Y, born in Saratoga Springs, Jan 26, 1913, Cornell University Medical College, New York City, 1938, served an internship and residency at the New York Hospital in New York City, specialist certified by the American Board of Surgery, fellow of the American College of Surgeons, veteran of World War II, associate in surgery at the Albany (N Y) Medical College, from 1939 to 1941 assistant in surgery at his alma mater, director of Northeastern New York Medical Service (Blue Cross–Blue Shield), on the consultant staff and general surgeon, Eastern New York Orthopedic Hospital-School, chief of surgical staff at St Clare's Hospital and senior attending surgeon at the Ellis Hospital, where he died July 26, aged 47, of coronary thrombosis

Meyer, J Harold Ⓜ Louisville, Ky, University of Louisville School of Medicine, 1930, associated with the Kentucky Baptist Hospital, Jewish Hospital, St Anthony's Hospital, Red Cross Hospital, St Joseph Infirmary, and Norton Memorial Infirmary, died July 18, aged 62, of myocardial infarction

Schulze, Hans August, Indianapolis, University of Cincinnati College of Medicine, 1939, served as medical director of the Indiana State Reformatory at Pendleton, Ind, died July 19, aged 55, of coronary occlusion and arteriosclerotic heart disease

Shepard, Myron, West New York, N J, College of Physicians and Surgeons of Chicago, School of Medicine of the University of Illinois, 1907, died in

the Beth Israel Hospital, New York City, July 13, aged 74, of acute coronary occlusion due to generalized arteriosclerosis

Smith, Woodruff, Rochester, N Y, Johns Hopkins University School of Medicine, Baltimore, 1918, member of the Industrial Medical Association, certified by the National Board of Medical Examiners, formerly member of the Wisconsin State Board of Health, in 1954 accepted an appointment as industrial physician with the Jones & Laughlin Steel Corporation in Pittsburgh, veteran of World War I clinical assistant at the University of Rochester School of Medicine and Dentistry associated with Park Avenue Hospital and the Strong Memorial Hospital, where he died July 18, aged 65, of reticulum cell sarcoma

Stein, Edward Ⓜ Oak Park, Mich, University of Michigan Medical School, Ann Arbor, 1938, specialist certified by the American Board of Ophthalmology, veteran of World War II and awarded the soldier's medal for bravery, served on the staffs of the Children's Hospital and the Sinai Hospital in Detroit, where he died July 18, aged 45, of cancer

Sterett, David Robb, Leavenworth, Kan, Kansas Medical College, Medical Department of Washburn College, Topeka, 1907, past-president of the Leavenworth County Medical Society and in 1959 was honored by the society for his long and distinguished service to the community, past president and staff member of the Cushing Memorial Hospital and St John's Hospital, where he died July 27, aged 80, of cerebral vascular disease

Stone, F Lee Ⓜ Chicago, born Jan 4, 1885, College of Physicians and Surgeons of Chicago, School of Medicine of the University of Illinois, 1910, associate professor emeritus of obstetrics and gynecology at the University of Illinois College of Medicine, past-president of the Illinois State Medical Society and the Northside branch of the Chicago Medical Society, emeritus member of the Chicago Gynecological Society, executive director of the Cancer Prevention Center, where he was past-president, veteran of World War I, for 46 years associated with the Henrotin Hospital, where he died Aug 1, aged 75, of subarachnoid hemorrhage

Stump, David James, Raleigh, N C, born in Kansas City, Mo, Dec 1, 1912, University of Kansas School of Medicine, Kansas City, 1936, specialist certified by the American Board of Pathology, member of the College of American Pathologists and the American Society of Pathologists, interned at Charles T Miller Hospital in St Paul, served a residency in pathology at the University of Kansas Hospitals in Kansas City, Kan, and a fellowship in pathology at Francis Delafield Hospital in New York City, from 1937 to 1940 assistant in pathology at his alma mater, later assistant professor of pathology at Columbia University College of Physicians and Surgeons in New York City, formerly assistant pathologist at Research Hospital and pathologist at the Mercy Hospital in Kansas City, Mo, attending pathologist at the New York Post Graduate Medical School and Hospital in New York City, pathologist at Santa Clara County Hospital in San Jose, Calif, and Memorial Hospital in Chattanooga, Tenn, associated with the Rex Hospital, where he died July 11, aged 47

Sutton, Richard Nevitte, Warrenton, Va, Georgetown University School of Medicine, Washington, D C, 1910, past-president of the Georgetown Clinical Society, formerly practiced in Arlington, Va, where he was past vice-president and secretary of the Arlington County Medical Society and associated with the Arlington Hospital, served as chairman of the board of the Clarendon (Va) Trust Company, died in the Memorial Hospital, North Conway, N H, July 22, aged 73, of aortic aneurysm

Sweaney, Isaac Frank Ⓜ Oregon, Mo, University of Tennessee College of Medicine, Memphis, 1950, interned at the Baptist Memorial Hospital in Memphis, Tenn, and at one time a resident at the Missouri Methodist Hospital in St Joseph, Mo, served as president of the Nodaway-Atchison-Gentry, Holt-Worth Counties Medical Society, associated with the Fairfax (Va) Community Hospital, veteran of World War II, died in the Missouri Methodist Hospital in St Joseph July 18, aged 40, of malignant hypertension, uremia, and pulmonary infarct

Swienty, Wilhelm Ⓜ New York City, Friedrich-Wilhelms-Universitat Medizinische Fakultat, Berlin, Prussia, Germany, 1930, served a residency at the St Mary's Long Beach Hospital in Long Beach, Calif, and the Central Maine Sanatorium in Fairfield, Me, where he was formerly assistant superintendent fellow of the International College of Surgeons, member of the American Trudeau Society, staff obstetrician and gynecologist at St Clare's Hospital, died in the Elmhurst (N Y) General Hospital July 13, aged 59, of emphysema, bronchiectasis, status asthmaticus, and right heart failure

Sykes, James Louis, Savannah, Ga, Harvard Medical School, Boston, 1950, certified by the National Board of Medical Examiners, interned at the Edward J Meyer Memorial Hospital in Buffalo, veteran of World War II, died June 6, aged 38, of pulmonary edema

Tourtillott, Walter Wallace Ⓜ Porterville, Calif, Cooper Medical College, San Francisco, 1904, died in Yountville July 5, aged 88, of coronary heart disease

FOREIGN LETTERS

BELGIUM

Myocardial Infarction—The incidence of myocardial infarction has increased rapidly In 1930 there were 8 deaths due to coronary disease per 100,000 population, and in 1952 there were 266 Long-term anticoagulant therapy has, however, reduced the death rate after five years from 44 to 18 per cent and after ten years from 68 to 24 per cent After ten years about 30 per cent of the patients receiving anticoagulant therapy are able to be moderately active

Conference on Mycobacteria—At the international conference on *Mycobacteria* in December, Professor L Geurden, of Gand, Switzerland, classified *Mycobacteria* as (1) pathogenic *Mycobacteria* in poikilothermal animals, (2) pathogenic *Mycobacteria* in homeothermic animals, and (3) saprophytic *Mycobacteria*, identified by cultural characteristics, animal inoculations, sensitivity or resistance to bacteriostatic agents, and the tissular reaction produced Professor P Hauduroy, of Lausanne, Switzerland, called attention to the imperfections with which identifications are made, the lack of criteria for distinguishing different species, and the need for studies that would establish such criteria Dr Quertinmont described cutaneous ulcers rich in acid-fast bacilli, which spread far under the skin and even invaded bones In contrast to the bacillus detected by Janssens in Toia, the bacillus found by the speaker in Kasongo, Belgian Congo, could be cultivated It had definite characteristics and was particularly distinguishable from *Mycobacterium ulcerans* and *Mycobacterium balnei* The histopathological findings were those of an ordinary inflammation

Cancer Control—At the meeting of the International Union Against Cancer, Reding stated that despite all methods of treatment the incidence of cancer is constantly and rapidly increasing For this reason more attention should be given to the prevention of the exogenous factors causing cancer which are more important than the endogenous factors The exogenous factors are found in such food additives as coloring, preservatives, and bleaching agents, insecticides, detergents, and emulsifiers Other carcinogens are found in certain drugs, tobacco, edible oils, and motor fuels

BRAZIL

Hermaphroditism—At a meeting of the Associação Paulista de Medicina, Dr L Marques de Assis and co-workers stated that new techniques have been developed for determining the genetic sex and the chromosomal constitution of the tissues The study of the chromatin presented a few technical difficulties which were in good part simplified by the contribution of Bottura, of the Ribeirão Preto medical school in São Paulo, who, by previous intravenous injection of colchicine, succeeded, with samples of sternal marrow, in counting cellular chromosomes and establishing idiograms without the necessity of tissue cultures

This new method for the study of true hermaphroditism was applied to an adolescent of 14, reared as a boy, who had a penis without a urethra, labioscrotal folds without testes, and between them an infundibuliform depression with an orifice At the age of about 13, female hair distribution and mammary glands developed Palpation of the inguinal canal revealed a formation of elastic consistency later recognized to be an ovotestis.

The study of the psychological pattern of the patient revealed a male personality with minor traces of femininity The urethrocystography and the exploratory laparotomy disclosed the presence of a urogenital sinus receiving the urethra on the right side and a vagina of an adolescent dimension with tube and ovary on the left side The bladder was visualized The macroscopic examination disclosed the existence of an ovary on the left and an ovotestis on the right A smear of cells of the oral mucosa revealed a female genetic sex, and the chromosomal constitution, studied by means of Bottura's method, showed the characteristically feminine type XX

In contrast with this case the authors cited two others of true hermaphroditism studied by the same method but with male hair distribution and absence of mammary glands These two had the same genetic constitution but with female nuclear sex (presence of Barr's chromatin in more than 30 per cent of the cells of the oral mucosa) The authors pointed out that the absence of the Y chromosome did not prevent the appearance of the male gonad, which had, histologically, an aspect similar to that of the ectopic testes The possibility of mosaic did not seem probable because of the frequency of Barr's chromatin in the testicular tissue of the ovotestis

Tetralogy of Fallot—E J Zerbini and co-workers (*Rev paulista med* 56 431, 1960) reported a series of 87 patients with tetralogy of Fallot, 35 of whom could not have a complete examination The remaining 52 were classified, according to the type of lesion found infundibular stenosis, 23, infundibular and valvular stenosis, 19, and pulmonary atresia, 3 The operations performed were explor-

The items in these letters are contributed by regular correspondents in the various foreign countries

atory thoracotomy in 5 patients, aorticopulmonary anastomosis in 61, resection of pulmonary stenosis (Brock s operation) in 8, and complete correction of all deformities with extracorporeal circulation in 13 In the five patients subjected to exploratory thoracotomy, it was not possible to perform a palliative operation because of the conditions found in the pulmonary artery or the branches of the aorta Four of them died and the condition of one remained unchanged

Of those on whom aorticopulmonary anastomosis was performed, the Blalock-Taussig method was used in 34, the Potts method in 26, and the Blalock-Taussig operation combined with an incomplete Brock operation in one There were 12 deaths in this group The results were good in 34, fair in 7, and poor in 8 of the survivors The results of the aorticopulmonary anastomosis were difficult to interpret as this operation is frequently performed in children with grave cyanosis, as a life-saving measure Brock s operation was performed in eight patients of whom four died Late results were good in three patients and poor in one Most of those on whom the total correction of tetralogy of Fallot under direct vision was performed had severe erythrocytosis and a high hemoglobin level and hematocrit In this group there were eight good results and five deaths

DENMARK

Acetophenetidin and Renal Disease —The Danish medical press has frequently suggested the possibility of acetophenetidin medication being responsible in large measure for the apparent frequency of uremia running an unusually chronic course in young women To explore this possibility, Dr A W S Sorensen (*Ugesk laeger*, June 23, 1960) made creatinine-clearance tests on 678 patients (432 women and 246 men) after he had inquired about their consumption of the drug in the past

The patients were classified as those who suffered from chronic polyarthritis or those who suffered from non-rheumatoid disease, the number in each class was 202 and 476, respectively In neither class could he establish any definite correlation between the consumption, however prolonged, of acetophenetidin and the development of renal disease, nor could he show that already existing renal disease was aggravated by this drug

Phenylbutazone —After treating 214 patients with phenylbutazone, Dr O Juul-Moller urged a more appreciative attitude toward it (*Ugesk laeger*, July 14, 1960) He started treatment with 200 mg three times daily for three days, then 200 mg twice daily for two days, and thereafter a maintenance dosage of 200 mg once daily In addition to muscular and articular rheumatism, the ailments for which this treatment was given were phlebitis and herpes zoster

The 29 patients who were given this drug in spite of a history of gastric disease included only three who had to discontinue the treatment on account of side effects The teaching that gastrointestinal disease is a contraindication for this treatment should, therefore, be taken with some reserve

Of the 14 patients who did not tolerate the treatment well, the dyspepsia of 13 was aggravated by it, this led to its discontinuation in 4 The low cost of the drug is a factor in its favor, and it should be given a fair trial before the patient is committed to a comparatively costly series of treatments including massage, short-wave therapy, and hydrotherapy None of the patients developed agranulocytosis The combination of phenylbutazone with some steroid seemed to enhance its effects, all the patients thus treated responded well

Abortion for Chronic Polyarthritis —It is often taught in Denmark that when patients with primary chronic polyarthritis become pregnant, it is usually well to induce abortion on the assumption that this course will have a good effect on the disease To test the soundness of this teaching, Felbo and Snorrason (*Ugesk laeger*, July 7, 1960) made a follow-up examination of 50 women whose suitability for the induction of abortion was investigated between 1955 and 1958 by a maternity welfare committee

In the spring of 1959, all 50 were examined at home or in hospital with reference to what befell them in the interval Of the 50, 46 had suffered from primary chronic polyarthritis, and the request of 7 of these for the induction of abortion was rejected, in 4 abortion was spontaneous, and in 35 abortion was induced A comparison of the careers of the women whose pregnancy had been allowed to go to term with those whose pregnancy was interrupted artificially showed that the latter had fared no better than the former

With the modern methods now available for the treatment of primary chronic polyarthritis, much can be done to mitigate the ill effects of pregnancy and the puerperium, particularly if environmental conditions can be improved during the first two years after a confinement

Angina Pectoris —Dr T Castberg (*Ugesk laeger*, July 21, 1960) concluded from a series of seven patients and from the literature that the operative treatment of carefully selected cases of angina pectoris may afford marked relief and, perhaps, be effective in preventing coronary thrombosis Of his four patients undergoing the Beck I operation, three achieved relief and one was completely rid of his pain Of the three who underwent a modified Arnulff operation, two were rid of their pain The third patient derived no benefit from the operation but could continue to work There were no operative deaths In expert hands the operative mortality is 2 to 4 per cent

From both the literature and personal experience, Castberg found that some of the benefits of such operations depended on their psychic effects It is difficult to gauge the suitability of candidates for operation, for many of them are neurotic Several of the author's patients lacked clinical signs of heart disease which in some was demonstrable on operation This treatment can be relied on to give relief from pain in many patients and to reduce the need for palliative drugs Contraindications are faulty cardiac compensation and a history of coronary thrombosis within the preceding three months An indication for operative treatment is invalidism induced by angina pectoris found refractory to medical treatment

FRANCE

Increase in Syphilis—M R Degos reported at the meeting of the Medical Society of the Hospitals of Paris that syphilis between 1933 and the advent of penicillin in 1940 showed a progressively decreasing incidence which continued until about 1946 Since 1954 the incidence has steadily risen, particularly in Paris The speaker further stated that the chancre is often not recognized because it is attended with such unusual aspects as painful inflammatory ulcers

The wide use of antibiotics accounts for a certain number of syphilitic cases in patients who have no chancre, of inapparent syphilis, and of delayed clinical and serological manifestations Moreover, professional prostitutes, at least in Paris, are no longer the principal source of infection A significant increase in homosexuality is causing much of the increased incidence

Electroencephalography in the Aged—At the international congress on aging held in Paris in April, J Verdeaux and J Turmel presented a study of 15,000 electroencephalographic tracings made in aged persons In the patients of the control group, ranging in age from 30 to 39 years, the recordings were normal and constant In old age a decrease of the frequency of alpha waves was apparent and was associated with the presence of a theta rhythm This was considered a pathological sign in aged persons

Multiple Sclerosis—P Le Gac (*J Med Bordeaux*, April, 1960) reported that multiple sclerosis was almost always connected with residence on a dairy farm, contact with the cattle, or the drinking of raw milk In these patients the author demonstrated serologic reactions to various rickettsial and neorickettsial strains Of 52 serum samples, 14 gave negative, and 38 positive results The most frequent positive reactions were toward *Coxiella burnetii* and *Rickettsia prowazekii* The author believed that multiple sclerosis could be considered as a vascular complication of a rickettsial disease He recommended a new treatment of this disease, consisting of broad-spectrum antibiotics for the virus and warm balneotherapy

GERMANY

Guanethidine for Hypertension—W Meesmann (*Deutsche med Wchnschr* 85 1243, 1960) treated 32 patients who had hypertension of varying degrees with guanethidine for two to eight weeks Guanethidine was combined with dihydralazine in four patients and with reserpine in ten Both the systolic and the diastolic blood pressure levels were restored to almost normal even in patients with severe hypertension The heart rate diminished during treatment in 31 patients The average effective maintenance dosage was 40 mg daily There were no advantages in combining guanethidine with dihydralazine, but the combination of guanethidine with reserpine (0 5 to 1 mg daily) proved beneficial The dose of guanethidine could be reduced by one-third to one-half in the patients so treated

As regards side effects, mild orthostatic manifestations frequently occurred at the onset of treatment and became more pronounced when the dose was increased too quickly Where the treatment was consistently carried out, however, they decreased markedly or disappeared almost completely after eight weeks at the most Diarrhea occurred in one patient and impotence in another No other side effects were observed Guanethidine is an extremely effective antihypertensive agent which, provided the dosage is carefully adjusted, marks a step forward in the treatment of moderately severe and severe hypertension

Long-Acting Insulins—Spiess and Zschocke (*Deutsche med Wchnschr* 85 1127, 1960) compared the long-term effectiveness of long- and short-acting insulin preparations for controlling diabetes in children One group of 35 children received regular or protamine zinc insulin and required an average of two daily injections, and another group of 38 children was given long-acting insulin and required only one daily injection In all other respects the two groups were comparable Except for those diabetic children who could not be properly controlled even on the short-acting insulins, two-thirds of the patients of the second group could be satisfactorily managed on one daily injection of a long acting insulin

Of ten children followed for many years, six were still well controlled at the end of five years, but only six remained so controlled at the end of seven years Hypoglycemic and hyperglycemic episodes were no more frequent on treatment with

long-acting insulin than on treatment with short-acting insulin The management of diabetes in childhood should, wherever possible, be by single daily doses of long-acting insulin unless frequent metabolic derangement makes this impracticable

Postvaccinal Cerebral Complications—K Seelemann (*Deutche med Wchnschr* 85 1081, 1960) stated that between 1939 and 1958 a total of 390,104 children of all ages were successfully immunized against smallpox in Hamburg Of these, 46 developed definite postvaccinal encephalitis, 97 had pyrexia with convulsive seizures, and 38 had other cerebral complications

A death rate of 38 per cent among children under four years of age contrasted with a rate of 8 per cent in the older children There was a significant difference in the incidence of postvaccinal encephalitis between the two age groups if it is assumed that other forms of cerebral complications did not mask instances of postvaccinal encephalitis The difference in death rate between the two age groups was significant, too, on the same assumption

There was no evidence of a progressive increase in morbidity from the first to the twelfth year of life There was no difference in the incidence of postvaccinal encephalitis between children immunized by public health authorities, 9 per cent of whom had postponed vaccination for medical reasons, and those immunized by private practitioners, 23 per cent of whom had postponed vaccination Since 1955, children who had not been vaccinated by the time they had concluded their third year of life were no longer compulsorily vaccinated in Hamburg

GREECE

Tetracycline and Oleandomycin—G K Daikos and co-workers of Athens (*Deutsche med Wchnschr* 85 969, 1960) tested the antibacterial effect of tetracycline and oleandomycin in vitro on 253 bacterial strains, by means of serial dilution on solid agar plates The sensitivity of the various strains was measured in dilutions of the antibiotics from 0 3 to 20 0 mcg per milliliter When the drugs were used in combination, the ratio of tetracycline to oleandomycin was 2 1

Of the 154 *Staphylococcus aureus* tested, strains of 102 were sensitive to both antibiotics, 36 were sensitive only to oleandomycin, 5 only to tetracycline, and 11 were sensitive to neither Of other bacteria 59 strains were sensitive only to tetracycline, and 56 strains were resistant to either Of 16 *Staphylococcus* strains resistant to oleandomycin, 5 were sensitive to tetracycline True synergism of the two antibiotics could not be shown An additive effect was noted against 110 of the 253 strains, but this effect was not significant Similarly lacking in significance was the antagonism noted for 87 strains The two antibiotics in combination were never more effective than would be expected from the amount of each in the preparation

INDIA

Infectious Hepatitis—G Achari and co-workers assessed the results of treating 88 patients who had infectious hepatitis with vitamin B_{12}, antibiotics, and corticosteroids (*J Indian M A* 34 488 [June 16] 1960) Group 1 (18 patients) received 100 mcg of vitamin B_{12} intramuscularly, Group 2 (18 patients) received 1 Gm of chlortetracycline and 20 mg of bidecorticyl daily in four equally divided doses administered orally, Group 3 (18 patients) was given only chlortetracycline, Group 4 (17 patients) was given only bidecorticyl, and Group 5 (17 patients) was given none of these drugs All patients received 300 mg of ascorbic acid daily, administered orally, and 1 cc of vitamin B complex daily, intramuscularly

The best results were obtained with the corticosteroids alone The results were less satisfactory when the corticosteroid was combined with chlortetracycline The authors concluded that chlortetracycline was of no value in the treatment of this condition and might even prove harmful Similarly, results with vitamin B_{12} were disappointing, the jaundice took even longer to disappear in Group 1 than it did in the controls None of the drugs seemed to have any effect on the course of the disease itself as there was no significant difference in the number of days required for the hepatic function to return to normal

Protein Metabolism in Marasmic Children—R P Misra (*J Indian M A* 34 181 [June] 1960) studied the urinary excretion of total nitrogen and made quantitative and qualitative estimations of aminonitrogen and ammonia nitrogen in the urine of 15 marasmic children These values were compared with those obtained in 17 normal children of the same age group (0 to 24 months) An estimation of serum amino acids was also made The marasmic children were grossly underweight as compared with the controls The linear growth was little affected in the age group 0 to 12 months, but retardation of linear growth was noticed in the age group 13 to 24 months An increased loss of total nitrogen in the urine of marasmic children of all age groups and an increase in the excretion levels of aminonitrogen and ammonia nitrogen were observed The increased aminoaciduria was due to an increased excretion not of any one amino acid but of several Quantitative estimation of serum amino acids showed no increase in their concentration in marasmic children This would indicate that the liver is probably not affected as regards amino acid

metabolism, in these children The aminoaciduria may, however, be due to derangement of kidney function with particular reference to amino acid metabolism

Plasma Corticosteroids —Mahajan and Shah (*Indian J M Sc* 14.510 [June] 1960) studied variations in plasma levels of free hydrocortisone in 30 healthy subjects, 31 patients with certain diseases, and 3 women in the last trimester of pregnancy to determine the usefulness of this test in diagnosis

The range of value in the normal subjects was 5 0 to 22 5 mcg per 100 ml The readings were elevated in the last trimester of pregnancy To determine whether there was any significant difference in the values during the two phases of the menstrual cycle, the determination of plasma hydrocortisone was made in the preovulatory phase in 12 and in the postovulatory phase in 15 of the 27 normal (female) subjects The average value for the postovulatory phase was significantly higher than in the preovulatory phase Raised values were present in three patients with pituitary basophilism

The ACTH-plasma corticosteroids response test was helpful in differentiating hyperplasia in one and neoplasm in the other two The measurement of plasma hydrocortisone was also useful in these patients in following the progress of the patients with pituitary basophilism who were under therapy There were two patients with postnatal virilization due to adrenal hyperplasia The values for plasma hydrocortisone were 9 8 and 18 8 mcg per 100 ml, respectively, before treatment

There were 17 patients with postpubertal hirsutism Of these, seven had irregular menstrual cycles with monophasic basal body temperature (BBT) graphs, and 10 had regular cycles with biphasic BBT graphs Among the latter, although the mean value determined during the preovulatory phase was somewhat higher than that in the normal subjects during the same phase, the difference was not significant Among the former group, a high average value was obtained The values in two women in this group were as high as those in patients with pituitary basophilism, but the absence of the stigmata of that syndrome and the lack of hyperresponsiveness of the adrenal cortex to a standard test dose of ACTH would exclude the possibility of adrenal hyperplasia This estimation would thus be helpful in conditions associated with hyperfunction and hypofunction of the adrenal cortex as it is raised in the former and reduced in the latter

Hemoglobin E Disease —S Swarup and co-workers observed five patients with homozygous E (hemoglobin E disease), three of whom are the subject of a report (*J Indian M A* 35 13 [July 1] 1960) These three patients were encountered during an investigation of patients with thalassemia Two of them were mothers of patients with hemoglobin E–thalassemia, and the third was referred to them as having a refractory anemia with leukemoid blood findings

All had a slight pallor, and one had a slight icteric tinge in the conjunctivae The spleen was not palpable, but the liver was palpable in one patient Easy fatigability was a common complaint, and mild anemia of the normocytic-normochromic type was found in all Target cells formed 9 0 to 13 4 per cent of the total erythrocytes Paper electrophoresis showed a single peak in the position of the E The mother of one patient was found to be hemoglobin-E heterozygous Two patients transmitted hemoglobin E to all their children so that each child was heterozygous for this factor The fathers of these children were homozygous for hemoglobin A Hemoglobin E disease has been reported, so far, almost exclusively from south-eastern Asian countries

Encephalitis in Children —P C Bajpai and co workers (*J Indian M A* 35 1 [July 1] 1960) studied a series of 301 children admitted during an epidemic of encephalitis in July, 1958 A similar outbreak had occurred in 1954 The highest rate of admission was in July The environmental sanitation and ventilation of the homes of these children were inadequate The onset was abrupt in most patients The symptoms consisted of fever, convulsions, and vomiting In one patient the illness started with twitching of one side of the face, in another with left-sided hemiparesis, and in another with weakness of one of the limbs No adults were affected Of the 36 5 per cent who became deeply comatose, half died

The authors divided the patients into acute, subacute or chronic, and relapsing types The acute type included those with a fulminating course, all of whom died, those with an acute onset and neurological involvement, with complete recovery or with neurological sequelae, and 60 who were grouped as suspected abortive cases who had no significant neurological signs although they had an acute onset The subacute or chronic group had a protracted course with changing neurological findings ultimately resulting in some degree of invalidism, physical or mental or both

In the third type, relapse occurred after three days to six weeks The cause of the disease could not be determined, but the occurrence of fulminant cases in the early part of the epidemic and less fulminant and abortive cases later on, predilection for infants and children, high incidence of multiple cases in a family, presence of polymorphonuclear leukocytosis, and high fever at some stage suggested an infective etiology A viral cause was thought to be the most likely Selection of healthy children and lack of response to antibiotics supported this belief

CORRESPONDENCE

UPPER RESPIRATORY INFECTIONS

To the Editor—In the paper by Dr Nunnelly (*J A M A* 173 1020 [July 2] 1960) are a number of points that require clarification

1 Of the 106 'respiratory and associated conditions," presumably screened to eliminate viral infections but at the same time representing a random sample,' there are (Table 1) 106 associated organisms One must assume one organism for each patient Does this proportion of *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, and *Escherichia coli*, 58 out of 106 respiratory bacteria (Table 1), represent a peculiar geographic phenomenon?

2 In Case 2 one encounters something unusual, a beta-hemolytic streptococcus that is penicillin resistant Does this apply to one or more of the other 25 streptococci of Table 1? This is mentioned because of the difficulty we have in our efforts at rheumatic fever prophylaxis in convincing house officers of the necessity to treat hemolytic streptococcal infections with penicillin for at least 10 days It is feared that a recommendation to use a sulfonamide drug for this purpose will only add to our problems

3 Finally it may be noted that the good results obtained did not utilize a comparison of the drug under study with other therapy except for the statement that it is equally as effective

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To the Editor—As one deeply interested in the upper respiratory disease problem, I wish to question the validity of the conclusions arrived at by Dr Gordon Nunnelly in his article 'Sulfadimethoxine in Upper Respiratory Infections" in the July 2 issue of *J A M A* He reports on the isolation of 106 bacteria from the upper respiratory tract of 106 patients Of these cultures, 24 were *Escherichia Coli* or *Pseudomonas aeruginosa* The implication is that 24 patients had pure throat cultures of these micro-organisms and that they were the etiological agent of these patient s disease, an experience we have not yet had in the course of our studies

Dr Nunnelly reports that only 12 patients had poor results whereas his data indicate that 26 isolated micro-organisms were resistant to the medication used Clearly, 14 patients had good to excellent results without benefit of the drug employed, and one wonders if there were not others in the same group His report does not state whether ancillary treatment such as a salicylate was used

The author should be congratulated for making a bacteriological study, but one would hope that the data, as presented, would show more clearly the relationship between the isolated organism, its sensitivity, and the clinical response to treatment One pleads also for a more detailed recording of ancillary treatment in order that the true role of the drug in the patient's recovery might be evaluated better

The question of whether or not to use antibiotics in the routine treatment of acute upper respiratory disease has not been resolved, largely because scientifically controlled studies are few and then usually in captive populations The factors of the organism's drug resistance, patient drug sensitivities, incidence of serious complications following a 'wait and see" policy, bacteriological vs viral etiology, and others have not been adequately weighed in the balance, although some are making an effort to approach the problem with an unbiased viewpoint [1-5]

In a controversial field such as this, truth will evolve only from well-controlled experimentation Anything short of that is conjecture and contributes little to the resolution of this distressing problem It would be well that all concerned with reporting medical studies be familiar with an article by Saiger [6]

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The above comments were referred to the author of the contribution cited, and he has submitted the following reply—Ed

To the Editor—I thank Dr Rose for his frank appraisal of my paper I believe Dr Rose will agree that the treatment of acute upper respiratory illnesses is extremely divergent and haphazard today I confess my own consternation at the problem

I cannot explain why *Pseudomonas aeruginosa*, *Escherichia coli*, and *Klebsiella pneumoniae* were cultured from these patients It certainly is not the usual situation All patients in this study were acutely ill and did respond to therapy as indicated in the paper No ancillary therapy, other than rest and adequate fluids, was employed Our methods of culture leave me to believe that these organisms may have been incidental findings in patients suffering from viral infections

I submit to Dr Rose's objections on all but one count He points out that 14 patients in the study responded without benefit of sulfadimethoxine as revealed by resistance on sensitivity studies Allow me to point out that Case 2 revealed a beta-hemolytic streptococcus resistant to penicillin on the culture plate This probably was a laboratory error since it has never been seen by me on any other occasion I daily find that the laboratory sensitivities of a particular culture show resistance to the very drug that produced good clinical response in the patient Let us not forget that the laboratory is a means, but not the end in itself

In reply to Dr Selman, the term "random sample" was used to mean the first consecutive 106 patients seen in a general practice who had complaints of respiratory illness with objective findings suggesting bacterial infection It is not possible to screen out viral infections under these circumstances and I doubt that this could be done under the best of conditions, even in a center where expense is no factor I believe that clinical judgment can be relied on, however, to screen the majority of cases It does seem foreign to me to think that we should lose the art of medicine in the forest of laboratory procedures

That the proportion of cultured types of bacterial organisms is a peculiar geographic phenomenon, I cannot state with certainty It is indeed not usual to see *Pseudomonas aeruginosa* and particularly *Escherichia coli* as pathogens in upper respiratory disease This could be the error of my laboratory in identification of the organism, but I can assure you that these patients were equally as ill as the others in the study and their therapeutic response was as good

Regarding point number 2 in Dr Selman's remarks, I would reaffirm my conclusion in the paper that one cannot equate in vitro and in vivo testing as regards culture sensitivities I suspect this is due to the crude methods employed, but I believe all clinicians have seen seriously ill patients respond to a given drug with fall of temperature and improved physical status long before culture and sensitivity studies were reported which then show the given drug to be resistant

I believe no one today would disagree with Dr Selman's recommendation to use a full 10 days of penicillin therapy in hemolytic streptococcal infection This is sound advice But what of the penicillin-sensitive patient? Furthermore, it is well established that for prophylaxis of rheumatic fever, a good sulfonamide drug (sulfadiazine being the parent type) is acceptable One must still give preference to penicillin, however, for its bactericidal properties

As to the final point raised, I did not use a separate set of controls on placebos or place another group on broad spectrum antibiotics However, I have records of hundreds of other patients not recorded in this study who were treated in that period, either before or after the study group, with broad spectrum antibiotics or with "tincture of time" alone It is my opinion that the reported group in great majority responded as quickly, if not more so, and were able to resume their gainful occupations as soon as if they were treated by other means, and this response to therapy can be gained at a lesser expense per patient

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USE OF BENZENE IN THE TREATMENT OF BURNS

To the Editor —THE JOURNAL, Nov 17, 1959, page 1357, contains an official report of the Council on Drugs entitled "Current Status of The Therapy of Burns" It is dismaying to discover that that report advocates the use of benzene in the treatment of burns It is true that the word "frugal" modifies the recommendation, but the word "frugal" is not a quantitative term

Of all hydrocarbons in extensive use it is probable that benzene is the most toxic At the present time the maximum allowable concentration for atmospheric contamination is 25 parts per million, as published in the *A M A Archives of Industrial Health* (20 266 [Sept] 1959) This means that as little as 2 5 cc of benzene, if evaporated, would provide the maximum allowable concentration level in 1,000 cu ft of space One cubic centimeter of benzene entering the body through inhalation or skin absorption may be regarded as excessive

To a limited extent benzene is absorbable through the intact skin Through a denuded skin, as in the case of burns, it is believed that gross absorption may take place In the event of long repeated usage of benzene in burn therapy, chronic benzene poisoning, a dire affliction, becomes a prospect

The damaging properties of benzene are likely to be described in any text on industrial toxicology or general pharmacology Since Torald Sollmann long has been identified with the Council on Drugs, his description of benzene poisoning in "A Manual of Pharmacology" (ed 8, Philadelphia W B Saunders Company, 1957) is mentioned here and is illuminating Two sentences only are excerpted, as follows

"Contact of the liquid benzene with the skin adds materially to the danger" "Chronic exposure to benzene may lead to extensive eczema, with irritation of the skin follicles, cornification of the sebaceous glands, increased pigmentation and keratosis"

If there be a disposition to challenge the statements made with respect to percutaneous absorption, then another practical exposure may involve even greater risk The surface application of benzene readily may lead to evaporation and atmospheric contamination followed by inhalation This is more of a threat to the physician or nurse who daily may be carrying out such treatment on numerous patients In fact for any nurse or physician carrying out numerous daily treatments with benzene, chronic benzene poisoning from inhalation becomes a possibility

One of the well established aspects of benzene poisoning is a destruction of the body's protective mechanisms, meaning in this instance destruction of protective antibodies Infections in chronic benzene poisoning are commonplace The prospect of secondary infection in burns is enhanced by any persistent use of benzene

In the event of untoward events in the management of burns, any physician who makes use of benzene in therapy becomes subject to malpractice claims With the knowledge of the definitely damaging properties of benzene, any such physician will lack substantial defenses other than the fact that the A M A advocates such therapy If it be desirable to recommend cleansing agents in the treatment of burns there are numerous others just as serviceable as benzene but of a much lower order of toxicity Of such agents acetone may be mentioned Acetone is flammable, but for that matter so is the condemned benzene

It is hoped that the contentions here made are explored, and if even half the risks mentioned are accepted as valid it should come about that a substitution be made for this recommended use of benzene

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SUNBURN AND SKIN DAMAGE

To the Editor —At the turn of the century pathologists saw skin malignancy of the face and neck associated with long-continued exposure to wind and sun The patients were frequently sea captains, long-time market fishermen, and farmers Today, these same malignancies are found even more frequently, and the patients usually give a history of continued summer exposure of the skin with the sole objective of a fashionable summer tan Smog' may possibly be an added factor to an inflamed skin

In moderation, exposure to the sunrays presumably benefits the individual Overexposure year after year certainly does the skin no good It is recognized that a brunette skin is usually more tolerant, but the blonde skin usually reacts with freckles, then larger brown splotches, and a leathery type of brown skin This last change is not reversible and certainly is far removed from the lovely, smooth, soft skin of the young person

It would seem that the family physician and other physicians should begin to emphasize the damage done by overexposure of the skin to sunshine Potential malignancy is a danger lurking in the background

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PROJECT POOKASHONOMA

To the Editor —Many thanks for the literature about Pookashonoma (Foraker, A C Pookashonoma, *J A M A* 172 212 [April 30] 1960) I gather it is quite a serious problem in Vapid City It is not so common in New York as it was in the 1940 s and I wonder whether we are missing cases or whether some environmental factor which we cannot define has operated to reduce its incidence

However, although we have been fortunate in our experience with the disease, this is no excuse for ignoring the pleas of cities and whole regions in which this dangerous problem is endemic I have taken the liberty of passing your information on to Mr J Higby Farthingtrout, a well-known industrialist and philanthropist, who has expressed an interest in helping scientists who are attempting to conquer this disease

Mr Farthingtrout, as you doubtless know, is the principal benefactor of the Fullbust Foundation He has been identified with public-spirited movements ever since 1941 when he converted the entire output of his factories to the manufacture of double-barrelled slingshots Recently, he has become interested in furthering medical research This is due largely to the influence of his third wife, the former Cassandra Calhoun, a former nurse who took care of him during a siege of cerebral stenosis In fact, it is rumored that it was his subvention that made possible the publication of her book, The Fair Flower of Southern Womanhood and Their Interesting Pelvic Tumors"

I do hope that I have placed your literature in the right hands and that the Pookashonoma Opposed Organization receives some material support from Mr Farthingtrout After all, you and I who remember the big Pookashonoma epidemic in the Crimea are among the few who recognize it for the dread disease it can be

Will I be seeing you at the Epidepsis Conference in Biarritz?

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BOOK REVIEWS

Diagnosis in Locomotor Disorders By Kenneth Stone, D M, M R C P Cloth $5 75 Pp 224, with 53 illustrations Oxford University Press, Amen House, Warwick Sq, London, E C 4, 417 Fifth Ave, New York 16, Amen House, 480 University Ave, Toronto 2, Canada, 1960

The purpose of this small volume, as stated by the author, is to consider the principal differential diagnostic possibilities "in a number of prominent symptoms and signs in disorders of the locomotor system" The author adds that it is "a short book, restricted to essentials, for quick reference," written for those in physical medicine departments and rheumatic units of general hospitals and others dealing with the problems of the locomotor system, including general practitioners

A careful review of this volume attests to the success the author has achieved in his purpose It is clearly and succinctly written The symptoms and signs considered are arranged in convenient alphabetical order This arrangement, plus an excellent index, fulfills the author's aim of making the volume useful for quick reference The book cuts across specialty lines and presents the main entities to be considered for each principal sign and symptom related to the locomotor system, whether it be neurologic, orthopedic, or peripheral vascular

Certain defects should be mentioned The most obvious one concerns the roentgenographic illustrations which fail in most instances to show the points indicated in the legends and text Another difficulty, at least for the American physician, stems from the difference in terminology used in some of the conditions considered A similar point concerns the differences in emphasis placed on various conditions, which reflect their relative frequency in England and the United States Tuberculous conditions, for example, are stressed out of proportion to their incidence in this country On the other hand, Legg-Perthes disease of the hip is a more common cause of limp in children between 5 and 10 years of age in the United States than tuberculosis

In a compendium dealing with signs and symptoms in disorders of the locomotor system, weakness would appear to be a major item, but the indirect approach used, namely, a discussion of weakness only as associated with atrophy and spasticity, does not appear to be entirely satisfactory Much weakness can be present with little alteration of muscle tone in patients with upper motor neuron lesions In this connection, the author has not fully exploited the difference between the syndromes of upper and lower motor neuron involvement, which constitutes one of the principal aids to neurologic localization Contractures and trophic changes of skin and nails in the case of lower motor neuron lesions might have been included in a compendium of disorders of the locomotor system

Space limitations preclude enumeration of many other minor omissions and difficulties from a neurologic standpoint In spite of the limitations and criticisms mentioned, the fact remains that Dr Stone has bridged the gap between several specialties with remarkable success and has produced a ready reference which should be of value to practitioners dealing with conditions affecting the locomotor system For the very practical purpose intended by the author, this small volume can be endorsed as a useful addition to the medical literature ROBERT B AIRD, M D

An Experiment in Medicine The First Twenty Years of the Pratt Clinic and the New England Center Hospital of Boston By Joseph E Garland Half cloth Gratis Pp 107 Riverside Press, Cambridge, Mass, 1960

One may ask how a successful hospital center might have its beginning A good formula for this may be the friendship of a wealthy bachelor from Maine and a doctor interested in group therapy Such is the story of the Pratt Clinic–New England Center Hospital, a unit of the New England Medical Center, Boston, which, in addition, is comprised of the Tufts University School of Medicine, the Boston Dispensary, and the Boston Floating Hospital

In 1911, William Bingham, II, after moving to Bethel, Me, became a close friend of Dr John G Gehring Bingham took an interest in Gehring's psychotherapeutic experiments, and one of his first philanthropies was the building of Bethel Inn so that Gehring's patients would have a place to stay In 1931, Gehring sought relief for his angina from Dr Joseph Hersey Pratt, physician-in-chief of the dispensary Dr Pratt found in Gehring a listener who was sympathetic to the plight of the dispensary Although a 20-bed diagnostic unit had been constructed four years earlier, funds were lacking to equip the building Bingham was brought into the picture, and the unit was opened

Dr George Bourne Farnsworth, stepson of Dr Gehring, returned to Bethel in 1930, after retiring from the assistant professorship of obstetrics at Western Reserve University Farnsworth and Bingham, both in their fifties, discussed the sad condition of medical care in Maine A plan evolved to improve the Rumford Community Hospital through enlarged facilities and a program of help and instruction arranged by Pratt in Boston An important requirement was to fill the lack of pathological

service, and Dr H Edward MacMahon (now Professor of Pathology, Bacteriology, and Parasitology at Tufts) succeeded in providing more than adequate aid for pathology

According to to the original Bingham Associates Plan, Lewiston's Central Maine General Hospital would be the medical center for surrounding community hospitals needing assistance in complicated cases Should further services be needed, the dispensary would be the next referral point The need to develop further the diagnostic facilities in Boston was soon apparent Lack of money was not the only problem, for the question also was raised whether an extra floor should be added on the present building, which had been built in the 1880's, or a new hospital should be built across Bennet Street where the Franciscan Monastery of St Clare was soon to be vacated Dr Samuel Proger, who is physician-in-chief at the present time, played an important role not only in persuading Bingham to donate the funds but also in deciding on the new building On Dec 5, 1937, the cornerstone of the Joseph H Pratt Diagnostic Hospital was laid

Facilities were then available to expand the Bingham Hospital Plan Smaller hospitals in eastern Maine would use the Eastern Maine General in Bangor, and those hospitals in central Maine would continue to refer difficult cases to Central Maine These hospitals would in turn utilize the new Boston hospital Today, there are 25 co operating hospitals in central Maine, 17 in eastern Maine, and 18 in other parts of New England, all working directly with the Boston hospital

By 1946, the diagnostic services of the Pratt Clinic had become so successful that the need arose for a surgical unit, and two years later the Farnsworth Surgical Building was opened A patient of the Pratt Clinic helped in the need for research facilities In 1949, Jacob Ziskind, a Fall River industrialist, donated $100,000 for the purchase of a nearby building The Ziskind Research Building houses the laboratories of such well-known men as William Dameshek (hematology), Edwin B Astwood (endocrinology), William B Schwartz (kidney disturbances), and Louis Weinstein (infectious diseases) In 1954, the dormitory facilities of Posner Hall became a reality through the gift of Harry and Hannah Posner

Tufts University School of Medicine has played a major role in the development of the New England Medical Center since the late 1920 s when the late dean, A Warren Stearns, foresaw such a center Although Tufts' old building on Huntington Avenue had been 'the model medical plant' when it was built in 1901, it was out of date 30 years later A donation by Bingham in 1940 consummated the Center idea, and ten years later Tufts moved to its new location at 136 Harrison Ave The close relationship continues through the guidance of Dr Joseph M Havman, Jr, present dean of Tufts

As the author has said, "The achievement of this balance between science and art is no easy matter Medicine can accomplish the greatest good for the greatest number only through the impersonal machinery of organization and specialization, a complex mechanism for the application of science"

LAWRENCE C PARISH

The Older Patient By twenty-one authors Edited by Wingate M Johnson, M D, Chief of Staff, Private Diagnostic Clinic, Bowman Gray School of Medicine of Wake Forest College Winston-Salem, North Carolina Cloth $14 50 Pp 589, with illustrations Paul B Hoeber, Inc, Medical Book Department of Harper & Brothers), 49 E 33rd St, New York 16, 1960

Dr Johnson's new book is clear and concise in its coverage of the causes, symptoms, diagnosis, and treatment of practically all the disorders of later years, with special emphasis on the proper handling of these patients and their clinical, mental, and physical problems One must read, or at least see, this comprehensive, complete, and practical guide to diagnosis and treatment of the geriatric patient to appreciate its true value to anyone who is practicing medicine and who is seeing and will continue to see, in ever-increasing numbers, patients in the over 60' age group

Twenty-one experts have made available their years of study in this one book for the benefit of specialists, generalists, and their patients This comprehensive volume, consisting of 564 well-written, informative pages, deals not only with the physical ailments which beset the elderly but also presents, in a practical and most interesting and informative manner, such broad basic subjects as nutrition of the aged, the anatomic changes which accompany the aging process, surgical principles involved in the treatment of the aged, the sociologic aspects of aging, and a chapter on helping the older patient adjust to age

Separate chapters, all written by authorities, discuss diseases of the heart, the endocrine system, the musculoskeletal system, the nervous system, and many other topics Other chapters are devoted to metabolic diseases, mental disorders of the aging, infectious diseases of older people, and disorders of the gastrointestinal tract and digestive organs A chapter on pulmonary diseases includes new information on the use of steroids in viral infections in the older patient, another is on the often neglected subject of the gynecology of the older woman, and an extensive coverage of geriatric urology is included

This book has been most carefully written and even more carefully edited It will prove to be a valuable addition to the armamentarium of any physician, with the possible exception of the pediatricians, who would also profit greatly by a thorough perusal of the invaluable information condensed in the book

DAVID B ALLMAN, M D

QUESTIONS AND ANSWERS

ACHALASIA

To THE EDITOR —*What are the pathophysiological findings in cardiospasm? Are the cholinergic fibers defective or hyperactive, or are the adrenergic nerves missing?*

Heino Trees, M D, Washington, D C

ANSWER —Although the term "cardiospasm" has been used for many years to describe achalasia of the esophagus, it is now known that spasm of the cardia does not exist in this condition

Achalasia is caused by a degeneration of the plexuses of Auerbach in the body of the esophagus—usually the lower third The cause of the degeneration is unknown Motor and inhibitory stimuli reach the esophagus via the vagi, which contain the preganglionic parasympathetic nerve fibers These fibers make synaptic connection with the postganglionic neurons within the plexuses of Auerbach When degeneration of these postganglionic neurons occurs, as in achalasia, the motor pathway is interrupted This accounts for the disturbance of esophageal peristalsis and the failure of the esophagogastric junction to relax during deglutition

Normally, the pharyngoesophageal and the esophagogastric junctions of the esophagus are maintained in a state of tonic contraction These closing mechanisms effectively seal the esophagus above and below and allow the entrance and exit of material only during swallowing when they open in response to the deglutition reflex With the onset of deglutition, a peristaltic contraction arises in the pharynx and proceeds over the pharyngoesophageal junction, the body of the esophagus, and finally over the esophagogastric junction As the peristaltic contraction approaches these junctional areas they relax, allowing the contraction to propel the swallowed material through

The propagation of the primary peristaltic contraction and the reflex relaxation of the junctional areas of the esophagus probably depends on a high degree of coordination of incoming motor and inhibitory stimuli which have their origin in the medulla If these stimuli are blocked at the postganglionic level, disorganized motor activity results The extreme sensitivity of the esophagus to methacholine in patients with achalasia supports the theory that achalasia is due to a disorder of the intrinsic nerve plexuses

N C HIGHTOWER, M D

The answers here published have been prepared by competent authorities They do not, however, represent the opinions of any medical or other organization unless specifically so stated in the reply Anonymous communications cannot be answered Every letter must contain the writer's name and address, but these will be omitted on request

LOW-CALORIE SWEETENERS

To THE EDITOR —*What is the toxicity of sodium cyclamate (Sucaryl) when taken over a long period?*

R W Mueller, M D, Del Mar, Calif

ANSWER —There is no evidence that the cyclamates are toxic when taken at levels up to 5 Gm per day for seven and a half months, but at this level the stools may become mushy At 7 Gm per day a slight increase in frequency of bowel movements may occur The level at which some softening of the stools occurs varies, and in some subjects 0 1 Gm per day may show some effect There is no indication that this formation of mushy stools is related to any functional change in the gastrointestinal tract The softening is probably due to an increase in fecal bulk arising from osmotic effects of unabsorbed cyclamate The cyclamates are sodium or potassium salts of cyclohexenylsulfamic acid

OGDEN C JOHNSON, PH D

HYPNOSIS AND THE ELECTROENCEPHALOGRAM

To THE EDITOR —*Does hypnosis have any effects on the electroencephalogram? If so, please describe them Could you list one or two references to studies in this field?*

A J Gilbert, M D, North Canton, Ohio

ANSWER —The effects of hypnosis on the electroencephalogram are not yet fully understood The best consensus of opinion based on current data indicates that the hypnotic state per se does not cause any significant change in the electroencephalogram It is possible, however, to bring about changes in the level of emotional excitation during hypnosis through suggestions inducing either arousal and anxiety or deep lethargy and stupor Under such circumstances, electroencephalographic changes similar to those seen in marked excitement or in drowsiness may be seen More specific findings have been described from time to time, but no consistant confirmations have developed in the scientific literature There are many references to studies in this field Two are listed below

LOUIS J WEST, M D

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BILATERAL HEADACHES

To the Editor —*A 22-year-old man complained of occipital swelling and bilateral occipital and temporal headaches of a throbbing nature that are present only after wearing a hat, no matter whether the hatband was tight or loose He was in the Army for four years but never had this complaint until March 1960 He was treated with antihistamines without benefit Findings of physical examination and roentgenograms of the skull have been negative What is the cause and treatment of this condition?*

Eugene F Dierksheide, M D
Long Island, N Y

Answer —The most common cause of headache in the general population is that of cranial artery distention, chiefly in the branches (extracranial and dural) of the external carotid artery Recurrent unilateral or bilateral throbbing headaches in any location of the head (including the occipital region) have in recent years been classified under the broad general term of migraine, as a result of the work of Dr H G Wolff and his collaborators They need not be preceded by visual disturbance, paresthesias, or other prodromal symptoms, nor need they be accompanied by nausea and vomiting to be classified under this heading

Sufferers with this type of recurrent headache are, in most instances, energetic, conscientious, proud, and ambitious and have a tendency to perfectionism, compulsiveness, intolerance of low standards in their environment, and a proneness to generate tension These traits may, or may not, be evident superficially Headaches of this type are sometimes partially alleviated by direct compression of the scalp arteries (temporal or occipital) or the external carotid artery in the neck The wearing of a tight hat or the use of a tight band about the head has actually been practiced by some patients to gain relief Nevertheless, in situations of prolonged, daily vascular headaches ('status migrainus'), the tissues surrounding the vessels may have a reduced pain threshold and the scalp may become tender and sore Thus, wearing a hat conceivably could aggravate the headache

Another possibility is cranial arteritis (formerly called "temporal arteritis"), a giant-cell granulomatous arteritis of the scalp vessels The condition usually occurs in old people (65 to 85 years) and is manifested by markedly tender, swollen, firm, nonpulsatile scalp arteries, mild fever, anemia, increased erythrocyte sedimentation rate, and general debility Occasional cases have been reported at younger ages, including one instance in a patient aged 21 years Other possibilities are occipital and suboccipital muscle tension headache associated with chronic emotional tension, such as anxiety or depression, occipital neuralgia associated with irritation of the greater occipital nerve or the 2nd and 3rd cervical nerve roots, upper cervical spine arthritis, and posterior fossa intracranial tumors

Intracranial causes of the occipital headache may be ruled out through the usual means of neurological examination, roentgenograms of the skull, spinal puncture, electroencephalogram, and if necessary, pneumoencephalogram or intracranial arteriogram Roentgenograms of the cervical spine should be made If signs of cranial arteritis are present, biopsy of a swollen tender artery is imperative In the absence of evidence of structural disease of the head, by far the most relevant procedure is that of personality investigation To date there has been no acceptable evidence supporting the role of allergy in recurrent headaches or of the value of either histamine therapy or of antihistamine drugs

George A Schumacher, M D

THROMBOPHLEBITIS

To the Editor —*A patient has come to me exhibiting thrombophlebitis of one of the antecubital veins, which vein was the site of an intravenous anesthetic injection 16 days earlier Although the patient felt pain in the vein from the date of the operation, he only felt tender lumps along the course of the vein after this 16-day period On examination, the affected part was warm to the touch, and very tender along the course of the vein, especially over the lumps Is it usual for clotting to take place after so long a period? Does the concomitant intramuscular administration of trypsin, phenylbutazone, and anticoagulants augment the fall in the prothrombin index aimed at by bishydroxycoumarin therapy?*

M D , South Africa

Answer —In chemical or traumatic phlebitis such as in this case it is conceivable that clotting may occur some weeks after the trauma There may have been a low-grade inflammation for days before clotting took place The pain in this type of chemical phlebitis is often analagous to the pain that is associated with causalgia This may be the result of damage to sympathetic nerve fibers in the venous wall As far as I know, trypsin does not influence the prothrombin level Phenylbutazone, however, has been reported as augmenting the fall in the prothrombin level during bishydroxycoumarin therapy The combination of trypsin and phenylbutazone is usually sufficient for treatment of this type of phlebitis If symptoms persist, heparin is preferable to bishydroxycoumarin and should be used for two weeks Pulmonary embolism is rare in upper extremity phlebitis of this nature The pain of this type of phlebitis is sometimes relieved by sympathetic ganglion blocking drugs

Meyer Naide, M D

RADIOACTIVE STRONTIUM

To THE EDITOR —*In view of the fact that radioactive strontium competes with calcium for uptake into fetal and children's bones, would it not seem advisable to give an ancillary source of calcium to pregnant women and to children, rather than large amounts of milk? Are calcium tablets also likely to be contaminated with radioactivity?*

M D, California

ANSWER —I have been unable to get any more information about the source of calcium used in calcium tablets for pregnant women I have been told by chemists that these tablets are made from bones of animals that might possibly be contaminated with strontium, and I have been told by other chemists that the calcium comes from quarries where the risk of contamination is small I am afraid that the only way to get the facts would be to ask each drug firm to trace the source of the calcium in its tablets through its supplier—an almost impossible task

ROUTINE OOPHORECTOMY

To THE EDITOR —*Should the ovaries be removed in women 40 or 45 years of age who undergo a total hysterectomy and whose ovaries appear normal on gross inspection at the time of operation? It is assumed that these women, at the time of operation, have either large myomas, severe bleeding problems, or other adequate criteria for the hysterectomy, and show some symptoms of being at least in an early phase of the menopause*

J E Eckdale, M D, Marshall, Minn

ANSWER —An ovary may appear normal morphologically, and yet show histological and other evidence of pathology In cases such as described in the question, oophorectomy has been advocated on the grounds that ovarian function ceases and atrophy occurs soon after hysterectomy and that removal prevents the subsequent development of cancer of the ovary The arguments against removal are (1) that many such women still menstruate, (2) normal tissue should never be removed (if doubt exists, obtain several specimens for biopsy), (3) that if the menopause has not yet set in, removal may precipitate it in a more rapid and severe form than would otherwise have occurred, and (4) that the operation might result in atrophy and shrinkage of the vagina

The ultimate decision whether oophorectomy should be performed in these patients will depend largely on the personal experience of the physician who has the last word in the matter

IRON-DEXTRAN COMPLEX

To THE EDITOR —*In August, 1959, I administered iron-dextran complex to a patient who has marked hypochromic anemia I gave it in the prescribed manner, but as the patient is very thin, I used a 1½-in needle She developed a marked blue-black discoloration of the skin, which is more disturbing to me than to her Is there any way of promoting the absorption of the iron-dextran? Has iron-dextran complex been taken off the market on account of its alleged carcinogenic potentialities?*

M D, New Jersey

ANSWER —Iron-dextran complex in massive doses has been shown by British investigators to induce sarcomas in rats (H G Richmond, *Brit M J*, 1947, 1959) It may be questioned whether the same thing is likely to occur in human beings, since rats are much more susceptible to sarcomas The preparation has, however, been withdrawn from the market in this country Although it has been administered to many patients, no sarcoma has been reported to have resulted Possibly, after further investigation, it may again be made available It had the advantage of producing fewer side-effects than any other preparation of iron available for parenteral use It is well to remember in this connection how limited the need for parenteral administration of iron really is Orally administered preparations, of which ferrous sulfate remains the first choice, will produce almost as rapid an increase in reticulocytes and hemoglobin in iron deficiency anemia The oral route should be used whenever possible, and the parenteral route resorted to only when oral administration is not practicable The discoloration mentioned probably cannot be mobilized and so should be left alone In this patient, careful but unobtrusive observation and follow-up is the best course

ANSWER —The injection appears to have been deep subcutaneous rather than intramuscular The black discoloration is due probably in part to the decomposition of iron dextran and in part to the decomposition products of hemoglobin Under these circumstances, hemoglobin would be absorbed more slowly than usual The discoloration has, therefore, many of the characteristics of a black tattoo Hyaluronidase would not significantly enhance the absorption of such deposits Chelating or other solvent agents could not be used in practical concentrations because of the amount of metal that was deposited by the injection Such deposits would not respond to mobilizing techniques As in the case of a tattoo, the best method of removal probably would be excision If masking is needed for cosmetic purposes, tattooing with flesh-colored pigment might be considered

ERYTHROMELALGIA

To THE EDITOR —*Is there a treatment for erythromelalgia?*

M D , New York

ANSWER —For reasons that are not understood, small doses of aspirin will relieve the distress of erythromelalgia for several hours and sometimes for several days If aspirin is not helpful, treatment may be difficult Other analgesic drugs should be tried, but narcotics should be avoided since erythromelalgia is a chronic condition Occasionally, a vasoconstricting agent (25 mg of ephedrine, or a small dose of ergot such as that contained in Plexonal tablets) may be of some benefit when given three or four times daily Patients soon learn from experience to wear well-ventilated shoes and hosiery that is light in weight Exposing the hands and feet to cool air or immersing them in cold water gives temporary relief Patients with erythromelalgia characteristically sleep with their feet uncovered and obtain relief from the burning pain in their feet by walking barefoot on linoleum or tile floors Although true erythromelalgia is so rare as to be considered a medical curiosity, senile or idiopathic burning distress in the feet is a rather common complaint and is frequently confused with, and erroneously diagnosed as, erythromelalgia

RAY W GIFFORD, JR , M D

MUCOVISCIDOSIS

To THE EDITOR —*What is the value of testing tears for salt in cases of cystic fibrosis of the pancreas? Are iodides of any value in the bronchopneumonias secondary to this disease in children?*

Juan Rodriguez, M D , Cleveland, Ohio

ANSWER —In patients with cystic fibrosis of the pancreas tears have abnormally high chloride and sodium levels, as do sweat and saliva from the same subjects (*Pediatrics* 22 507, 1958) Whereas there is virtually no overlap in values between patients who have and those who do not have this disease in the case of sweat, the variation in the case of tears and of saliva is so great as to make analysis of these secretions impractical as a diagnostic procedure The 'sweat test' still is the cornerstone of diagnosis of cystic fibrosis The new simplified and safe iontophoretic method is advised for this test (*Pediatrics* 23 545, 1959)

Iodides are of some assistance in the treatment of the pulmonary involvement in some patients with cystic fibrosis Therefore, they can be tried to assess their effectiveness, but antibiotic and aerosol administration are still the main forms of therapy of the respiratory complications of this generalized disorder

EXPLOSION HAZARD

To THE EDITOR —*Is there any danger in using Alevaire (which contains a detergent, sodium bicarbonate, and glycerin) with oxygen, since its glycerin base makes it potentially explosive?*

Robert W Sucsy, M D , East Hampton, N Y

ANSWER —In the Physician's Handbook, published by the Winthrop Laboratories, specific directions indicate that Alevaire may be nebulized with either oxygen or compressed air When oxygen is the gas being used, closed ice-cooled tents are required Ordinary oxygen tents with recirculation-refrigeration units are unsuitable If used in the indicated manner, there is a minimum of danger This product contains only 5% of glycerin, and, in solution as well as in nebulized form, the presence of ample moisture aids in keeping the procedure within normal safety limits An increase in temperature in the tent will tend to vaporize the water and to increase the glycerin concentration and thus to enhance the possible danger of fire, explosion, or both

JOSEPH B JEROME, PH D

HYPERTHYROIDISM AND PREGNANCY

To THE EDITOR —*A 33-year-old woman developed a diffuse toxic goiter three months ago and has thus far responded well to propylthiouracil She is now pregnant I would like to continue antithyroid medication as long as possible to insure control, but I believe it would probably harm the fetus if continued too long What is the recommended management?*

William Harper, M D , Helena, Mont

ANSWER —There is no concrete evidence that propylthiouracil, given in appropriate doses, is harmful to the human fetus in utero, provided hypothyroidism is not produced by therapy Astwood (*J Clin Invest* 11 1045, 1932) reported 22 normal infants born to 19 mothers who were taking propylthiouracil throughout pregnancy Others have reported similar results Becker (*Ann Surg* 149 867 [June] 1959), however, reported on three infants with thyroid abnormalities delivered of mothers who had been made myxedematous by therapy and suggested conservative administration of desiccated thyroid in sufficient doses to prevent maternal hypothyroidism Probably the most generally accepted therapy for hyperthyroidism in pregnancy is preparation with antithyroid drugs, followed by subtotal thyroidectomy in the middle of the second trimester Inasmuch as a fairly large proportion of patients subjected to this operation suffer at least a transient episode of myxedema, it is undoubtedly wise to administer thyroid hormone for the remainder of the pregnancy

NEOMYCIN

To THE EDITOR —*Has neomycin ever been reported to produce a cholangiolitic type of jaundice?*

Harry N Akesson, M D, Oakland, Calif

ANSWER —No case of neomycin-induced jaundice has come to our attention This drug is poorly absorbed from the gastrointestinal tract and therefore produces few, if any, adverse systemic effects when given by this route The chief toxic effects noted from parenteral administration are ototoxicity and renal damage

CHRISTIAN WINGARD, M D

IMMUNIZATION

To THE EDITOR —*In immunization procedures (diphtheria-pertussis-tetanus, poliomyelitis, and typhoid especially), when is a patient considered to have lost the benefit of one or more injections so that he must start all over again? Some hypothetical examples are as follows 1 An infant given a first injection of DPT antigen at 3 months of age is brought in for his second injection at 17 months of age 2 A man who had the complete series of three injections of typhoid vaccine 21 years ago and no booster injections plans a trip overseas and comes in for typhoid injections 3 A veteran who has had no injections against tetanus since 1945 finds himself in need of protection against tetanus because of a soil-contaminated laceration When should such patients be considered susceptible to the diseases in question and to need the original series repeated?*

Joseph P Reardon, M D, Boston, Mass

ANSWER —As far as is known, once a person has been inoculated with an antigen, the capacity to respond to that antigen is never wholly lost Over the years, however, the vigor of the response to a recall dose appears to diminish gradually Thus, no single answer fits all three of the examples cited The 14-month interval since the infant's first injection would be of no consequence Indeed, the response may be even better than it would have been at a one-month interval Hence, the recommended immunization schedule may be resumed where it was discontinued In the second example one may follow the practice of the U S Armed Forces and give a single booster injection of typhoid vaccine—either 0 5 ml subcutaneously or 0 1 ml, intracutaneously This booster dose will restimulate the patient's immune response in ample time to prepare him against subsequent typhoid infection

The situation in the third example is somewhat different The capacity to respond to a booster dose of tetanus toxoid will not have been lost after 15 years, but there is some evidence that the speed of this response may be less than maximal Thus, for routine lacerations a booster dose of tetanus toxoid, given promptly, will provide ample augmentation of the patient's protection If, however, the attending physician believes there is any danger because of the nature of the injury, because of delay in its treatment, or—because of limitations in feasability of débridement—that fulminating tetanus might result, then combined prophylaxis with 1,500 units of tetanus antitoxin and a simultaneous booster dose of tetanus toxoid (at a separate site) is justified The antitoxin will protect the patient during the short interval of a few days when the residual immunity from previous tetanus immunization might possibly be insufficient to neutralize all the toxin produced by severely contaminated or neglected injuries

GEOFFREY EDSALL, M D

ANSWER —The American Academy of Pediatrics (Evanston, Ill) report of the Committee on the Control of Infectious Diseases (1957) states "Prolonging the interval between injections, even up to six months, interferes rarely if ever with the final immunity" The longest permissible interval between a third injection of DPT and a booster is three to four years and for poliomyelitis vaccine two years These answers are arbitrary and based on meager data compiled from (1) antibody and antitoxin levels on serums of persons who had their series of primary DPT and poliovirus vaccine doses spaced at intervals appreciably longer than the customary monthly (or bimonthly) periods, and those who had their booster doses appreciably later than the customary one to three years after completion of the primary series, and (2) clinical evidence of failure to confer protection, chiefly against tetanus, pertussis, and poliomyelitis, in persons who, after completion of their primary series, had their booster dose at an interval much longer than the customary

Physicians should remember that active artificial immunity cannot be attained until weeks after the final dose of the primary series Furthermore, when doses are spaced far apart, exposure to one or another of these diseases might occur before immunity has had an opportunity to develop fully, also, parents are more likely to forget the dose, or might move away When there is a question about a dose, it is prudent to give it, because active artificial immunity is quantitative, and depends on adequate total dosage of potent antigen As a general rule, it is advisable to adhere to the directions in the package literature There are now available quadruple antigens, whereby simultaneous immunity can be conferred against diphtheria, tetanus, pertussis, and poliomyelitis

L W SAUER, M D

TREPHINATION

To the Editor —*I recently examined a young man in anticipation of a court trial concerning a head injury which he sustained a few years ago A bilateral trephination was done at that time, but when I examined him all I could find was a bilateral depression in the temporal region Do the small burr holes used in trephination as performed these days fill in completely with bone regeneration? I have read in medical history that skulls of ancient Egyptians showed evidence of trephination and that the holes in the skull persisted Was this because larger holes were made in those days?*

M D , Pennsylvania

Answer —The burr holes made today usually are 1 5 cm (⅝ in) in diameter Of the resulting bony defects, some are replaced completely by spontaneous bone regeneration within a few years, others remain unchanged for years, as seen in roentgenograms Defects of the skull 2 5 cm (1 in) or more in diameter rarely are replaced by spontaneous bone regeneration An excellent review of prehistoric and primitive trephination is given in Walker's A History of Neurological Surgery" (Baltimore, Williams & Wilkins Company, 1951, p 1 ff) According to this source, neolithic trephined skulls have been found in at least 12 European countries Evidence of precolumbian trephining has been found in North America, Mexico, and South America For some unknown reason, trephining was not practiced in ancient Egypt (with possibly rare exceptions)

Arthur D Ecker, M D

CONTRACEPTIVE TABLETS

To the Editor —*Is any tablet available which could determine ovulation, and also one that could be used for contraception?*

P E Hilton, M D , Kirksville, Mo

Answer —As far as I know, there are no tablets which are of value for the determination of the time of ovulation Ovulation time is best indicated by various tests for estrogenic activity This activity usually reaches its height with the maturation of the ovum and may be roughly measured by typical changes in the cervical mucus, the vaginal platelets, the endometrium, and the basal body temperatures The results of most of these tests run parallel to the degree of estrogenic activity, but individual differences in reactivity render it impossible to delimit the exact day of fertilization potential The basal body temperature record seems to be the most accurate and satisfactory method to determine the time of ovulation of normal women with normal bimodal curves but fails, as do other tests, when faulty ovulation and irregular cycles are present

Several tablets may be used as contraceptives These include diethylstilbestrol, which inhibits ovulation if given daily in sufficient amounts, and the 19-nor-steroids which not only inhibit ovulation but also the secretory changes in the endometrial glands, producing a status inimical to nidation Although effective as contraceptives, the 19-nor-testosterones cause an excessive stromal development, a rise in the basal body temperature similar to that of pregnancy, and occasionally a pseudodecidual cast if administration commences after ovulation and before nidation In general, the side-reactions from these various products which prevent ovulation or nidation will wear off quickly once their administration has ceased, but this is not always the case, and their continued use over long periods seems hardly justifiable because of their carcinogenic potential and various side-effects

Walter W Williams, M D

ABDOMINAL ADHESIONS

To the Editor —*I am working on a medical paper about adhesions of the abdomen Unfortunately, we have few reliable statistics about that subject here in Europe, and I wonder if, in the United States, more material would be available and if you would assist me in obtaining these details What is the ratio of abdominal adhesions as a sequence to abdominal operations? What percentage of patients, suffering from abdominal adhesions, need medical care, and what percentage are full or partial invalids? What methods of prophylaxis and therapy are in use by American surgeons?*

M D , Switzerland

Answer —There are no reliable statistics with reference to the incidence of adhesions after operations within the abdomen Not all these patients are operated on a second time, nor do all come to autopsy It is probably correct to state that adhesions of some degree follow almost every laparotomy However, a very small number of these patients, perhaps less than 1%, have subsequent trouble due to adhesions Patients who are operated on many times as a result of a diagnosis of adhesions usually have an irritable colon, peptic ulcer, or some other disease Acute intestinal obstruction is frequently caused by adhesions from a previous laparotomy This, however, calls for surgical, rather than medical, treatment Intermittent attacks of intestinal obstruction may result from abdominal adhesions and cause some degree of invalidism Here, again, the treatment is surgical Most surgeons rely on gentle handling of tissues and the careful covering of raw surfaces with peritoneum to avoid or minimize adhesions

Lester R Dragstedt, M D

SANITATION OF BATHING BEACH

To the Editor —*A 30-acre lake fed by springs is used by about 75 families for swimming The main swimming area is about 3,000 ft square, with a mean depth of 10 ft Where should samples for* Escherichia coli *counts be taken? How often? What time of day? What is an unsafe* E coli *count for a bathing beach? What diseases can be attributed to an unsafe swimming area? If the* E coli *count is high, what amount of chlorine should be added to the main swimming area? How often? How soon after adding chlorine can the area be used for swimming? What means other than chlorination can be used to lower a high* E coli *count? Should any other sanitary tests be made? Is there any correlation between insanitary swimming conditions and the presence or absence of fish? Does decaying vegetation add to the swimming hazard? Will a sample taken on a rainy day have a higher or lower count than one taken when it is not raining? Does the count vary with the season?*

M D New York

Answer —A 30-acre lake is a rather large body of water to place under continuous control in order to assure its freedom from pathogenic organisms Probably the only practical procedures would include a survey of the area to check for the presence of any contamination from household or barnyard drainage, and a laboratory check for coliform organisms in the portion or portions of the lake where swimming will occur The first procedure makes possible the elimination of sources of gross contamination, and the second permits limitation of swimming to areas where the coliform count is not high For the areas selected for swimming, some authorities have recommended that the chlorine residual be not less than 0 2 ppm nor more than 0 5 ppm

To maintain this residual, a chlorine dosage of from 1 0 to 1 5 ppm may be necessary Frequency of dosage would depend on the number of treatments required to maintain the correct chlorine residual The water should be suitable for swimming as soon as the chlorine residual has dropped to 0 5 ppm after treatment For such a large body of water the only practical methods of lowering the *E coli* count would be the elimination of sources of pollution, including the enforcement of sanitary measures for swimmers and others in the drainage area, and the localized use of a bactericide such as chlorine

In some sections of the United States, swimmers' itch, caused by a *Schistosoma* that infests certain snails, should be guarded against—generally by means of copper sulfate treatments of the water A limited number of persons may be allergic to contact with certain blue-green algae An increasing number of reports of gastrointestinal illness caused by blue-green algae makes it desirable to prevent excessive growths of these organisms by treatment of the water with an algicide such as copper sulfate

Fish are not likely to be significant as carriers of human pathogens The presence of carp and the lack of other fish may indicate that the water is polluted with sewage or other organic wastes Decaying vegetation may tend to bring about anaerobic conditions in the water, with unpleasant odors and organic debris which would decrease the pleasure of swimming Blue-green algae may also be stimulated to grow and rapidly decompose in such an area

A sample taken on a rainy day may produce a higher percentage of false-positive tests for coliform bacteria due to the aerogenes-type of organisms being washed in from the soil *E coli* counts also could be higher after a rain if washings from sewer drains or barnyards entered the water at that time The *E coli* count might increase with the season if contamination of the water increased as the swimming season progressed

It is essential that the local or state board of health be consulted about regulations involving provisions for sanitation, laboratory testing, and the treatment of swimming waters, as well as for additional information on the problems referred to above

POLYP OF GALLBLADDER

To the Editor —*I have examined a 50-year-old woman who had a roentgenographic diagnosis of polyp of the gallbladder Her gallbladder function was normal and she had no symptoms of biliary disease What is the incidence of malignancy in this type of polyp?*

Charles R Nevins, M D, Phoenix, Ariz

Answer —"Polyp" as applied to the gallbladder is a nondescript term that often is difficult to define with accuracy, clinically or biologically Benign epithelial tumors of the gallbladder are extremely rare Polypoid and cystic cholecystitis have frequently been misnamed papilloma or adenoma Less than 50 cases of true papilloma are recorded in the literature Most "polyp-like" excrescences which appear on the cholecystrogram are deposits of cholesterol covering a thin, fibrous stalk and a single layer of columnar epithelial cells In most instances, a malignancy of the gallbladder is associated with a nonfunctioning organ The five-year survival rate following operations for malignancy of the gallbladder is extremely low Most operative cures have occurred when a small tumor was discovered fortuitously, at the time of laparotomy for some other reason Therefore, if one can demonstrate a possible tumor roentgenologically, the best course would be to perform a cholecystectomy

Joseph B Kirsner, M D

VITILIGO

To the Editor —*Why does the hair of some patients turn white after a normal delivery? A 35-year old woman delivered a male infant at term in August, 1959 Delivery was spontaneous after labor of one hour and 15 minutes This, her third pregnancy, was uneventful except for a feeling of lethargy, but as pregnancy progressed the lethargy subsided She also developed vertigo in the last week of pregnancy At the time of delivery she was a blonde Beginning about two weeks after the last delivery, her hair became white at the roots Now it is completely white, not grey, and thick as always but of finer texture Her eyelashes and eyebrows are also white Prior to this she could get a suntan any time she wished, but now she is unable to acquire one What is the diagnosis, and what treatment is recommended?*

Clement C Boehler, M D , El Paso, Texas

Answer —From the description of the patient, it appears that she has a good example of total vitiligo Usually, vitiligo is made worse after delivery or any type of physical or emotional stress reaction Occasionally, patients with vitiligo have hyperthyroidism or pernicious anemia, but in general they are in good health Ordinary greying of hair is to be considered part of a vitiliginous process It is, however, common for people with vitiligo to get early greying of hair

Aaron B Lerner, M D

INFECTIOUS HEPATITIS

To the Editor —*For how long after recovery from acute infectious hepatitis should a patient abstain from alcohol?*

M D , New York

Answer —Attempts to demonstrate an injurious effect of alcohol on the liver in patients who have recovered from acute viral hepatitis, both from the clinical and the laboratory viewpoint, have generally failed This is true, except in patients who have used excessive amounts of alcohol, which might be expected to injure the liver in the absence of a recent history of hepatitis On the other hand, in patients who are convalescing from acute hepatitis and who still have abnormal liver function tests, including hyperbilirubinemia, we have frequently noted that alcohol may prevent further recovery or may even produce a relapse Therefore, it seems reasonable to ask patients to forego alcohol for about three months after recovery from acute hepatitis and to avoid excessive amounts for a year after recovery

Richard B Capps, M D

RETINITIS PIGMENTOSA

To the Editor —*Have any effective methods of therapy been evolved for retinitis pigmentosa? Has adrenal corticosteroid therapy been of avail?*

Alexander Sanders, M D , Flossmoor, Ill

Answer —The treatment of retinitis pigmentosa, a heredodegenerative disease of the retina, remains as discouraging today as it was 50 years ago New methods of treatment are legion, and their numbers bespeak the failure to prove that one system is universally beneficial Perhaps the most popular vogue is the implantation of placental extracts according to the Filatov school Objective estimates of improvement, however, have been too poor to be recommended unequivocally In short, the management of retinitis pigmentosa remains an enigma Some basic work in the chemistry of retinal function has been accomplished and may be the first foothold in an approach to useful therapy

Arnold S Breakey, M D

IMMUNIZING QUALITIES OF PRIMARY TUBERCULOSIS

To the Editor —*Regarding the sensitizing versus the immunizing qualities of primary tuberculosis (The Journal, Questions and Answers, May 21, page 326) I pointed out some 25 years ago that much futile controversy could be avoided by applying logic to matters of common knowledge At that time, there were urban populations with 90 per cent incidence of tuberculin reactions among tested adults If reinfection were as easily contracted as the primary infection, a number approaching 90 per cent of the 90 per cent could be expected to have the adult type of tuberculosis Obviously, there was greater resistance to reinfection than to the primary infection*

On the other hand, if the immunity were complete there would be no reinfection We must, therefore, be dealing with a greater or lesser degree of partial, or conditional, immunity It was also common knowledge that most of the 90 per cent had their primary infection and recovered without being aware that they were sick, or even knowing when it occurred There were also a few people with scars of adult tuberculosis and no history, but they were the exceptions rather than the rule Furthermore, it was common knowledge that the lesions and tissue reactions were profoundly different in primary and reinfection tuberculosis, and much more serious in the latter Obviously, along with the partial immunity, the body had acquired a susceptibility to different types of tuberculous infection

As to the proposal to give prophylactic chemotherapy to every positive reactor under the age of

3 years, I believe it to be ill advised It is still true that dangerous sequelae from primary tuberculosis are the exceptions, and they are to be feared much less since the advent of specific chemotherapy Moreover, the prophylaxis itself is not entirely harmless, and its effectiveness is still conjectural The incidence of untoward reactions to the drug is far greater than the incidence of the sequelae it is expected to prevent It is far from a foregone conclusion that the reasonably expected benefit justifies the hazard Another important consideration is the danger of creating resistant strains of the bacilli Granted that alternative drugs can be used if resistance develops to one, and that concurrent resistance to all the drugs is a remote possibility, it is nevertheless a possibility and, given enough time and exposure, even a probability The time is even hastened by the common practice of using several drugs simultaneously

We could have anticipated the trouble with resistant staphylococci, and, perhaps have avoided it by more restrained and judicious use of antibiotics We can anticipate a far worse experience with resistant tubercle bacilli from the indiscriminate use of chemotherapy I suggest that the wholesale treatment of every tuberculin reactor under the age of 3 years hardly comes within the scope of due caution

Frederick B Exner, M D
Medical and Dental Bldg
Seattle 1

The above comment was referred to the consultant who answered the original question, and his reply follows —Ed

To the Editor —*The correspondent is correct in stating that the immunity to tuberculosis is partial and conditional and is not to be depended on under conditions of heavy exposure This is one of the objections to the widespread use of BCG vaccine in the United States On the other hand, the opinion is now widely held that initial infection with* Mycobacterium tuberculosis *is a significant event, and that the danger of meningeal and miliary complications is present in every young reactor It is, therefore, the preferred present-day practice to give isoniazid (INH) prophylactically to children under 3 years of age (some specialists also give it to children under 5) who have a positive tuberculin reaction*

The studies made to date by Palmer, Edwards, Omodei-Zorini, and others definitely indicate a protective effect of INH After years of use there is little indication that INH, given in prophylactic doses, has any significant toxic effects, and this small risk seems preferable to the threat of disseminated tuberculosis This is the "logic applied to these matters of common knowledge" It has been shown that inapparent infection with poliovirus is common, and that paralytic complications are relatively rare Nevertheless, there is every justification for the use of poliomyelitis vaccine to protect against the paralytic form of the disease The same argument holds with INH prophylaxis for tuberculosis

Edward Kupka, M D

PSYCHOLOGICAL EVALUATION FOR FOREIGN DUTY

To the Editor —*In* The Journal, *April 9, page 1712, there is a question regarding the psychological evaluation for foreign duty In the last 10 years, a great deal of effort has been put into the selection of personnel for foreign assignment In 1952, the United States Civil Service carried out a research project on selection methods for overseas employees The United States Information Agency now has an elaborate and effective procedure for screening and selecting candidates for overseas jobs The World Federation for Mental Health is at present carrying out a research project on "Selection of Personnel for Cross-Cultural Service" under a Ford Foundation grant*

Mottram Torre, M D
Assistant Director
International Federation for Mental Health
414 Riverside Drive
New York

The above comment was referred to the consultant who answered the original question, and his reply follows —Ed

To the Editor —*As stated in the answer, the fact is that much of the work in this area has not been published, at least in a form that is available through ordinary bibliographical references Information concerning the studies of government agencies and industries in this area of research does not appear often in the usual scientific publications I am familiar, for example, with an unpublished memorandum entitled "Psychological Tests in the Selection of Personnel for International Service" by Drs Wolfson and Vernon and one by Dr Wolfson alone These seem to me to be informed, and generally sound, documents Both documents, however, contain many statements of opinion, because in many ways this is still a highly controversial field For example, because of the repeated studies which have demonstrated low validities for projective techniques and for personnel interviews, I did not mention such methods in my reply However, these methods are spoken of with favor—in my opinion, unjustifiable favor—by Dr Wolfson Dr Vernon makes some of the appropriate critiques of such techniques*

ABSTRACTS FROM THE LITERATURE

Archives of Surgery

81 517-670 (Oct) 1960

*Antrum in Duodenal Ulcer
N D Chapman H N Harkins and L M Nyhus p 517
*Carcinoma of Larynx in Boy of Sixteen
L M Linkner and H B Lynn p 525
*Is Empiric Gastrectomy Justified?
R M Hardaway p 529
*Simple Nonspecific Ulcers of the Sigmoid Colon
L N Yates and E G Clausen p 535
*Perforation and Abscess of Duodenal Diverticulum
J W Sampsel and P R Zaugg p 542
*Femoral Neck Fracture Following Pelvic Irradiation
J G Finder and M Post p 545
*Radiation Ileitis
R H Abrahamson p 553
*Cholecystitis Emphysematosa
J K McGregor p 558
*Pancreatic Pseudocysts
R F Murphy and J F Hinkamp p 564
*Hemophilic Pseudotumor
J M Abell Jr and R W Bailey p 569
*Complications of Diaphragmatic Hernia
G V Brindley Jr p 582
*Epidermoid Cyst of Spleen Presenting as Pelvic Mass
G J Theiler p 591
*Volvulus of Cecum Associated with Malrotation of Small Intestine—L F Williams and others p 593
*Congenital Aganglionic Megacolon in Adults
E D Maghetta p 598
*Cardiac Arrest—Successful Resuscitation of Ambulatory Patient in Accident Ward—J E Hopkins p 604
*Serum Glutamic Oxalacetic Transaminase in Detecting Subclinical Liver Metastases—H Baden and others p 608
*Metastatic Carcinoma in Liver Simulating Acute Surgical Abdomen—R E May and others p 611
*Midleg Amputation in Patients with Necrotic Leg Muscles
N Rosenberg p 614
*Effect of Ganglionic Blockade on Survival After Tourniquet Shock—N J Saltz p 618
*Survival of Patients with Cancer of Colon
C P Barnett p 624
Observations on Innervation of the Pancreatic Islets
B R Heinzen p 627
*Preservation of Vaginal Function Following Radical Pelvic Surgery—W E Crisp and others p 632
*Transitional Cell Splenic Cyst Excised Without Splenectomy
E W Fonkalsrud and R L Walford p 636
*Failure of Sternal Fusion Bifid Sternum
J L Keeley A E Schairer and J J Brosnan p 641
*False Aneurysm of Hepatic Artery with Massive Hemobilia and Jaundice—J E Jesseph and K J May Jr p 646
*Combined Surgical Therapy in Management of Peripheral Arterial Disease—D E Strandness Jr and others p 649
*Rupture of Rectus Abdominis Muscle with Hematoma
W S Parker and K H Christiansen p 655
*Ormond s Syndrome
J S Margoles and A J McQueeney p 660
*Disposable Pump Oxygenator for Perfusion in Small Animals
F E Knock p 668

Antrum in Duodenal Ulcer—It has been believed that any successful operation designed to cure duodenal ulcer includes resection of the antrum Contrary to this view it is now known that the antrum can be retained provided that it (1) is vagally denervated, (2) remains in the acid stream and (3) has antral stasis prevented The exhibit presented at the Congress of the American College of Surgeons, Atlantic City, N J, in 1959, reviews the experimental and clinical documentation for these criteria it also reviews the operations that have been used to treat duodenal ulcer and classifies them as acceptable or unacceptable The acceptable operations meet the 3 criteria, the unacceptable operations do not Acceptable antrum removal operations are (1) antrectomy and vagotomy, and (2) adequate distal subtotal resection Acceptable antrum retention operations are (1) segmental resection with pyloroplasty, and (2) vagotomy with antral drainage by either pyloroplasty or gastrojejunostomy

Carcinoma of Larynx in Boy of Sixteen—This is the case report of a 16 year-old white male with well-differentiated papillary epidermoid carcinoma of the larynx The symptoms and physical findings are described, and the plan of treatment is outlined in detail Emphasis is placed on the fact that carcinoma of the larynx in children is a relatively rare condition, however, the symptomatology is such that any persistence of hoarseness or respiratory obstruction should be thoroughly investigated A plea is made for the radical plan of attack on any lesion of the larynx in childhood It is felt that the childhood laryngeal carcinomas are somewhat more aggressive than the adult tumors A 22-month follow up on this patient is included

Is Empiric Gastrectomy Justified?—Eleven cases of upper gastrointestinal hemorrhage were operated on and no pathology found after adequate workup and exploration, including wide gastrotomy Two cases had nothing done and have remained free of hemorrhage since Nine cases had empiric partial gastrectomy Of these, 4 had recurrent bleeding which in 3 cases required total gastrectomy within a week after the first operation All of the empiric gastrectomy specimens were reported as normal by the pathologist Submucosal hemorrhage was thought to be due to operative trauma However, in the 3 subsequent total gastrectomy specimens, these same lesions appeared to have progressed to a massive hemorrhagic gastritis, most marked in the fundus It is concluded that some cases of idiopathic upper gastrointestinal hemorrhage may be due to mild reversible gastritis that gastrectomy is not indicated and may be harmful

Simple Nonspecific Ulcers of Sigmoid Colon—Simple nonspecific ulcers of the sigmoid colon are defined and the medical literature reviewed Only 18 previously reported cases were found to which the author adds one more The etiology is unknown Constipation and rectal bleeding are the most common symptoms The preoperative diagnosis most commonly was generalized peritonitis in the perforated cases and sigmoid carcinoma in the nonperforated ones The preoperative diagnosis was acute appendicitis in 2 cases Four of 19 cases had perforated. The only other complication was obstruction in 2 cases Of the 15 cases reported prior to 1935, 10 died, 2 survived, and 3 are unknown Since 1935 all 4 cases have survived The treatment is segmental resection when feasible A case report of this entity in a 16-year-old girl is given and also a chart reviewing the reported cases

Perforation and Abscess of Duodenal Diverticulum—Duodenal diverticula are ordinarily asymptomatic However, this

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Titles marked with an asterisk (*) are abstracted

report illustrates a 29-year-old woman with right upper quadrant pain and a large paraduodenal abscess that perforated into the peritoneal cavity The origin of the abscess was a large duodenal diverticula The lesion was repaired from within the duodenal lumen, and the proximity of vital ducts to the area of repair was demonstrated

Femoral Neck Fracture After Pelvic Irradiation —Fracture of the femoral neck may occur spontaneously within 5 years after therapeutic irradiation for pelvic malignancy To be avoided is the diagnostic pitfall of presuming the fracture to be the result of metastatic tumor and erroneously prescribing additional irradiation therapy, thereby compounding the insult to bone tissue already involved by spotty avascular necrosis On the contrary, correctly diagnosed irradiation fractures heal well when properly reduced and internally fixed, supplemented by autogenous bone grafts, as illustrated by 2 reported cases Irradiation fracture should be suspected in any middle-aged woman who develops a painful hip after irradiation of the pelvis for malignancy Without trauma, the involved hip suffers progressive loss of motion, resulting in painful limp Roentgenograms usually disclose a varus fracture late in the symptom-complex Biopsy is recommended to confirm the diagnosis

Radiation Ileitis —It is the opinion of the author that radiation injury to the small intestine occurs more frequently than has heretofore been reported This is especially true with the increasing use of intensive therapy (such as high-energy and multiple portal-cobalt) The case reported had a combination of x-ray therapy and radium implantation Frequently the occurrence of radiation ileitis is confused with the advent of recurrent malignancy, and the relief afforded by surgical treatment is neglected This was obvious in the case reported which had multiple diagnoses over a 20-year period prior to surgical resection Awareness and knowledge of this condition as shown in the outline of the clinical diagnosis, pathology, and treatment should call attention to and obviate this error

Cholecystitis Emphysematosa —It is suggested that cholecystitis emphysematosa is a complication of acute cholecystitis and will be encountered more frequently because of the aging diabetic population Organisms capable of causing a gas gangrene infection are known to be common inhabitants of the extra-hepatic biliary passages It is postulated that these organisms reach the gall bladder via the portal circulation and are capable of surviving phagocytosis in the liver sinusoids The differential diagnosis between cholecystitis emphysematosa and cholecystenoenteric fistula can usually be made on the basis of a plain roentgenogram and confirmed, if required, by an upper gastrointestinal series or barium enema Early cholecystectomy is the treatment of choice, but the surgeon must be governed by factors presenting in the individual case The use of hydrating fluids, heavy antibiotic therapy, and antigas-gangrene serum improve the prognosis remarkably

Pancreatic Pseudocysts —In our study 35 pancreatic pseudocysts were reviewed The purpose of this review was to discuss the trend in treatment of pseudocysts at Cook County Hospital during the last decade In 1949, the evidence supported the fact that pancreatic pseudocysts were best treated with external drainage by marsupialization The authors are now convinced that internal drainage is the most efficient method of treatment Twelve of the 35 pseudocysts were drained internally, with excellent results in 10 There were 2 mortalities One death followed an improper application of this procedure The treatment of pseudocysts, however, must be selective When internal drainage is not advisable, drainage by catheter shuld be established as a temporary measure Pseudocysts treated by catheter drainage should have postoperative cystograms to prove the presence or absence of ductal communication If ductal communication is found, some type of internal drainage is advised

Hemophilic Pseudotumor —Two cases of pressure necrosis of bone in hemophiliac Negro male siblings have been studied Both had biopsies because of suspected neoplasm and, like 9 of 17 previously reported cases, both succumbed to subsequent hemorrhage and sepsis This lesion resembles osteogenic sarcoma most closely Eleven of 19 cases were associated with trauma The femur was the site involved in 12 of the 19 patients Pathologic fractures occurred in 4, and 3 fatalities followed spontaneous rupture Twelve of 19 had some type of surgical intervention We have suggested surgical indications rarely to exclude neoplasm or infection, occasionally to prevent fatal rupture of the untreated lesion, and often to alleviate pain Surgical management might include evacuation of the early hematoma or judicious amputation of the late pseudotumor

Diaphragmatic Hernia —Diaphragmatic hernias occur frequently and often are asymptomatic or produce mild symptoms which are controlled satisfactorily by medical management, but hernias of the diaphragm may produce serious complications associated with considerable morbidity and possible fatality From January, 1948 to April, 1959, the author performed diaphragmatic herniorrhaphy for 133 patients There was one recurrence Most frequent indications for surgical treatment were intractable symptoms following medical management Twenty-five patients had massive, continuing, or recurrent bleeding, 4 required emergency operations because of exsanguinating hemorrhage Ulcerations of esophagus or stomach were frequent complications These lesions were painful, sometimes perforated, produced strictures, or were the source of serious bleeding Patients occasionally developed strictures of the lower thoracic esophagus, usually as a sequel of chronic regurgitating esophagitis or esophageal ulceration Incarceration, strangulation, and obstruction were formidable complications Seven patients had surgical intervention because of incarceration of a viscus in the hernia, 3 patients had emergency operations because of obstruction Persistent or recurring aspiration pneumonitis with regurgitant esophagitis warranted careful consideration of herniorrhaphy One patient had a coexisting carcinoma of the esophagogastric junction The etiologic relationship of these 2 lesions has not been established, but they may coexist or simulate each other In this series, 6 patients had traumatic hernias of the diaphragm, 4 required emergency treatment because of complications such as hemorrhage, obstruction, strangulation, and mediastinal shift The Allison technique was satisfactory for hiatal herniorrhaphy Traumatic hernias of the foramen of Morgagni and foramen of Bochdalek usually were repaired by direct suture Mesh was used as a prosthesis to close large defects in the diaphragm

Epidermoid Cyst Presenting as Pelvic Mass —Epidermoid cyst of the spleen is rare and represents only one variety of benign splenic cysts Usually the presence of a mass in the left upper quadrant or left hypochondrium is the initial

sign However, as illustrated by this case report, the tumor may be present below the pelvic brim Thus, the possibility of a splenic cyst must be kept in mind in the complete differential diagnosis of a pelvic mass

Volvulus of Cecum and Malrotation of Midgut in Adults — Congenital abnormal intestinal rotations may be the cause of intestinal obstruction in the adult as well as the infant The obstruction can be acute, chronic, or recurrent, and may occur at any point in the midgut The endless anatomical variations can be evaluated properly only on the basis of a sound knowledge of the embryology of intestinal rotation The surgical correction of these anomalies has as its desired result the restoration of bowel position as nearly normal as is compatible with freedom from obstruction In the infant this often is accomplished by establishing a position of nonrotation In the adult a normal position usually can be arranged

Congenital Aganglionic Megacolon in Adults —Congenital aganglionic megacolon usually considered to be a disease almost exclusively of the young, may infrequently be manifest in adults after many relatively asymptomatic years This case report describes such an occurrence in a 69-year-old woman with colonic obstruction who at autopsy was proven to have a zonal agangla of the rectosigmoid Though the usual history of constipation since birth was absent, the highly dependable sign of barium retention was well demonstrated in this patient A review of the literature reveals rare but definite occurrence of this disease in adults

Successful Resuscitation of Ambulatory Patient —Cardiac arrest is being more frequently recognized and with prompt treatment under proper circumstances total recovery can be achieved More unusual, and with less satisfactory outcome are cases of cardiac arrest occurring outside of the operating room A review of cases of successful resuscitation under varying circumstances outside of the operating room is presented A case report detailing the specific treatment necessary and the aftercare is cited In this instance an ambulatory patient in the accident ward, after having minor lacerations of the fingers sutured and bandaged suddenly and inexplicably developed circulatory failure It is to be emphasized that the drastic procedures necessary require judgment and should be undertaken only if duration of arrest is less than 3-4 minutes and facilities are available

Serum Glutamic Oxalacetic Transaminase and Liver Metastases —In 240 patients with gastrointestinal cancer without clinical signs of liver metastases, the serum glutamic oxalacetic transaminase (S-GOT) was determined preoperatively Elevated values were found in 37 At operation liver metastases were found in 13 of these 37 patients and also in 24 out of the 203 patients who had normal S-GOT In 229 cases, the serum alkaline phosphatase (SAP) was also determined Simultaneous elevation of S-GOT and SAP was found in 22, and 12 of these patients proved to have hepatic metastases Thus, from a practical surgical point of view an elevated S GOT is an insufficient indicator of the presence of subclinical liver metastases Even in the small group of patients with elevation of both S-GOT and SAP, liver metastases did not occur with sufficient frequency to contraindicate celiotomy with radical surgery in mind

Metastatic Carcinoma in Liver Simulating Acute Surgical Abdomen —The diagnosis of carcinoma metastatic to the liver should be considered in patients with the triad of right upper quadrant pain, fever, and leukocytosis, regardless of age Three cases were reviewed to demonstrate this symptom complex Each patient had an emergency laparotomy with the preoperative diagnosis of subhepatic abscess The 1st patient was 26 years old and was found to have a carcinoma of the right colon metastatic to the liver The 2nd patient was 32 years old and was found to have carcinoma of the jejunum metastatic to the liver The 3rd patient was 60 years old and had metastatic carcinoma in the liver, probably from the stomach

Midleg Amputation and Necrotic Leg Muscles —Two case reports are presented in support of the author s thesis that, in a small, selected group of cases, in which gangrene of vascular origin has resulted in necrosis of muscles below the knee, a useful midleg amputation may still be feasible The overlying skin of the leg must be of good color and warm to the touch Capillary ooze from the cut end of tibia and bleeding from the skin flap edges should be present The procedure consists in radical excision of all necrotic muscle, leaving skin, subcutaneous tissue, and bone behind It should prove useful in isolated instances where leg-muscle necrosis follows arterial embolism or embolectomy, unsuccessful or incomplete thromboendartectomy, or where such necrosis follows post-traumatic fascial compartment swelling The anatomico-physiologic rationale behind this unorthodox amputation is presented

Ganglionic Blockade and Survival After Tourniquet Shock — Compensatory vasoconstriction may have deleterious effects on the shocked organism An attempt was made to evaluate the effect of a vasodilator, trimethaphan camphorsulfonate (Arfonad), on survival in shocked animals Rats subjected to 4- and 5-hour periods of tourniquet shock and pretreated with trimethaphan camphorsulfonate were partially protected Significantly improved survival rates resulted In the 4-hour group 21 of 38 animals survived, compared to 14 of 50 controls In the 5-hour group, 7 of 40 animals survived compared to 0 of 60 controls Protection was not achieved when the drug was continued into the shock period The protective mechanism in pretreatment probably results from reduced fluid loss into the injured limb resulting from vasodilatation and lowered pressure Ablating vasoconstrictor tone in established shock increases damage by depriving vital organs of their critical blood supply

Survival of Patients with Cancer of Colon —Major teaching institutions report about 25% over-all, and 45 to 55% operative 5-year survival in cancer of the colon The purpose of this study was to assay the outcome of colonic cancer cases treated in a small general hospital from 1948 through 1959 During this period 80 patients were subjected to diagnostic or therapeutic surgical intervention Fifty-three cases were determinate having lived 5 years or less Twelve of these 53 patients survived at least 5 years, a 23% over-all survival rate If only the 38 patients regarded as curable were considered, there was a 32% operative 5-year survival Three of the 80 patients died in the postoperative period

Preservation of Vaginal Function After Pelvic Surgery —It is the obligation of the physician treating women with pelvic cancer to return them to their family situations with a minimum of emotional and physical disturbance It is, therefore important that vaginal function be maintained The

report illustrates a 29-year-old woman with right upper quadrant pain and a large paraduodenal abscess that perforated into the peritoneal cavity The origin of the abscess was a large duodenal diverticula The lesion was repaired from within the duodenal lumen, and the proximity of vital ducts to the area of repair was demonstrated

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Surgical Cure of Ulcerative Colitis
E J Boehme p 74

Chemotherapy in Malignancies of Gastrointestinal Tract — Two types of chemotherapeutic agents seem to be effective in palliative treatment of inoperable or metastatic diseases, in control of malignant effusions, and as an adjunct of surgery in tumors of stomach and colon One type is the group including nitrogen mustard triethylenemelamine (TEM), and triethylenethiophosphoramide (thio-TEPA) The other is 5 fluorouracil The author relies primarily on methyl bis (beta chloroethyl)-amine hydrochloride (Mustargen) injected intravenously or into body cavities For office use he prefers triethylenemelamine (TEM) in tablets Reduction of the tumor mass under treatment with 5-fluorouracil has been reported in 58 of 224 patients This drug is injected intravenously in a daily dose of 15 mg per kilogram of body weight for 5 successive days, increasing to 7 5 mg on the 7th, 9th, 11th, and 13th days if no toxicity is observed Good results have also been obtained with one weekly injection of 7 5 to 15 mg per kilogram In the author's own series the remissions were of short duration unless the drug was given almost continuously 2 of 7 patients with advanced metastatic carcinomas of the colon maintained improvement for almost 5 months For control of malignant effusions the instillation of 10 to 30 mg of nitrogen mustard into the abdominal cavity is more effective and more comfortable to the patient than radioactive isotopes or repeated paracenteses As an adjunct to surgical treatment the instillation of 0 1 mg of nitrogen mustard per kilogram of body weight into a major vein, of a similar amount well diluted in isotonic sodium chloride solution into the peritoneal cavity, and another 0 2 mg per kilogram of body weight into a peripheral vein improves the effectiveness and the cure rate

American Journal of Medical Sciences, Philadelphia

240 1-136 (July) 1960 Partial Index

Failing Rheumatic Heart Mechanisms
L A Soloff p 1
A New Face of Tuberculosis
F T Roque p 17
*Manifestations of Infectious Mononucleosis
R J Hoagland p 21
*Study of Pneumococcal Pneumonia
J C Kirby Jr and others p 30
The Blood Donor
F F Korzekwa and others p 48
*Dexamethasone Therapy
J Zuckner R H Ramsey and J J Budd Jr p 58
*Erythrol Tetranitrate in Therapy of Angina Pectoris
G E Altman and others p 66
Effect of Disodium EDTA on Digitalis Intoxicatoon
J L Rosenbaum and others p 77
*Effect of Nylidrin Hydrochloride on Cerebral Circulation
S Eisenberg p 85
Abnormal Hemoglobins
E Rossi p 93
Arteriole in Neural Lesions
G W Holt p 110

Manifestations of Infectious Mononucleosis —The author reports on 3 children 4 adolescents and 193 adults 17 to 35 years of age, with infectious mononucleosis who were observed at the Martin Army Hospital, Fort Benning Ga Of the 200 patients, 190 were inpatients All patients had characteristic hematological findings and heterophil antibody reactions Clinical features were fairly uniform, with lymph node enlargement present in all patients and pharyngitis in 4 out of 5 patients Sixteen patients (8%) had jaundice Subdivision of this syndrome into three clinical types is proposed pharyngeal, typhoidal, and icteric This large, consecutive series of patients provided an opportunity to approximate the frequency of complications Only 5 complications were observed, none more than once, these were rupture of the spleen, facial nerve paresis, mild meningitis, salivary gland inflammation and complete atrioventricular heart block Usually patients were febrile for 2 to 3 weeks All recovered Prolonged weakness or recurrence was not observed Five reasons for the discrepancy between these observations of clinical uniformity and the oft-repeated statement that mononucleosis is protean have been presented (1) Many reports cited to bolster the protean concept antedate the discovery of the heterophil antibody reaction in patients with mononucleosis, (2) many reports included cases regardless of serologic results, (3) some investigations included heterophil antibody reactions without use of the serum absorption techniques (4) diagnostic requirement of characteristic blood findings has, recently, been disregarded by several authors, and (5) uncritical, or unread, citing of older work

Study of Pneumococcal Pneumonia —The authors carried out a controlled blind study on 42 patients with pneumococcic pneumonia who were admitted to the General Hospital, Washington, D C, for treatment 21 patients received tetracycline and 6 methyl prednisolone The other 21 patients were given tetracycline only and served as controls The group of patients given tetracycline and 6 methyl prednisolone showed a more rapid defervescence than the control group Roentgenographic findings were inconclusive One patient treated with tetracycline and 6 methyl prednisolone died 8 weeks after hospitalization with right lower lobe pneumonia and aortic insufficiency, complicating factors were chronic alcoholism Laennec's cirrhosis, and post-traumatic epilepsy These factors cast some doubt on the direct relationship of the death to the short course of 6 methyl prednisolone administration Complications directly attributable to 6-methyl prednisolone did not occur There is no indication for adjunctive steroid therapy in uncomplicated pneumococcic pneumonia On the basis of the rapidity with which temperature returned to normal in the tetracycline-steroid-treated group of patients, controlled studies may show that adrenal steroids are of value in the highly febrile toxic patient

Dexamethasone Therapy —The authors report on 54 patients with rheumatoid arthritis who were treated with dexamethasone An initial suppressive daily dose of 2 to 3 mg of the drug was administered for 5 to 14 days, after which the dose was gradually reduced to maintenance levels Fifty per cent of the patients were simultaneously treated with gold salts, and practically all were taking salicylates in doses of 2 to 4 Gm daily The anti-inflammatory response to dexamethasone was very satisfactory All but 3 patients showed significant improvement The alleviation of rheumatic manifestations was similar to that observed with other steroids as regards rapidity, degree, and duration of improvement Undesirable reactions to dexamethasone were at least as frequent as with other steroids, and were more prominent in some of the patients Noteworthy were the edema, the marked bloating increased appetite, and weight gain The diabetogenic effect of the drug requires further evaluation, but preliminary information obtained in this study suggests that there may not be a decrease in diabetic complications Peptic ulcers developed in 4 patients, the true incidence

of this side-effect requires additional study Dexamethasone caused no consistent alteration in gastric-juice production The reported data indicate that this new synthetic antirheumatic steroid does not satisfy the criteria for a potent anti-inflammatory drug with a minimum of undesirable physiological side-effects

Erythrol Tetranitrate and Angina Pectoris—The authors report on 14 patients with angina pectoris to whom tablets containing 5 mg, 10 mg, or 15 mg of erythrol tetranitrate were administered under the tongue or in the buccal pouch These tablets were absorbed more rapidly and uniformly from the sublingual area than from the buccal pouch The prolonged duration of the beneficial effects of erythrol tetranitrate in these patients was evident after sublingual administration of erythrol tetranitrate with rapid dissolution time Therefore, the prolonged effect of this drug is not dependent on prolonged absorption The 5-mg sublingual tablets with rapid dissolution time were less frequently followed by undesirable side-effects and were as effective as larger doses in some patients Doses as large as 30 mg, 45 mg, and 60 mg were not effective in patients who failed to respond to 15 mg doses The sublingual administration of erythrol tetranitrate with rapid dissolution time was followed in some patients by a moderate decrease in systolic blood pressure

Effect of Nylidrin on Cerebral Circulation—The authors studied the cerebral vasodilatory properties of nylidrin (Arlidin) hydrochloride in 22 patients, 45 to 74 years of age, most of whom had overt cerebral vascular disease for which they were treated at the Veterans Administration Hospital, Dallas, Tex After clinical evaluation of the patients and the correction of any existing fluid and electrolyte disorders, initial measurements of cerebral blood flow and metabolism were made Nylidrin then was administered orally in doses of 12 mg, 3 times daily This initial dosage was subsequently increased to 18 mg, 3 times daily After a treatment period of 7 or more days, the measurements were repeated, 18 mg of nylidrin was given 30 minutes before the 2nd determination Oral administration of nylidrin hydrochloride for more than 2 weeks was associated with a 43% increase in cerebral blood flow When given for shorter periods, the effect was inconsistent The increase in cerebral function was associated with a decrease in cerebral vascular resistance and, in many patients, a slight decline in mean arterial blood pressure As pH and carbon dioxide pressure were not significantly affected by the administration of nylidrin, a primary cardiovascular effect of the agent is suggested

Blood, New York

16 943-1072 (July) 1960 Partial Index

Thrombopoiesis Factor Required for Platelet Production, Its Absence in Thrombocytopenia—I Schulman and others p 943
*Fluorescent Antibody Methods in Study of Platelets R Silber and others p 958
Common Antigen in Human Platelets and Megakaryocytes J J Vazquez and J H Lewis p 968
Hemoglobin H Associated with Uncommon Variant of Thalassemia Trait—W A Dittman and others p 975
Is There an "Embryonic or Primitive Human Hemoglobin? G Matsuda and others p 984
Toxic Porphyria A I Cetingil and M A Özen p 1002
Morphology of Buffy Coat in Normal Human Adults P Efrati and L Rozenszajn p 1012
Renal Hemosiderosis in Hemolytic Anemias Diagnosis by Needle Biopsy—P Leonardi and A Ruol p 1029

Fluorescent Antibody Methods in Study of Platelets—Studies carried out by the authors indicated that the reaction between platelets and fluorescent heteroantibody can be detected in a reproducible, specific, and sensitive fashion The method was used to study serum of healthy persons and of patients with idiopathic thrombocytopenic purpura (ITP) Although there is evidence that this is a disease of autoimmunization, the authors have been unable to demonstrate an antibody by the fluorescent technique in ITP serums known to have an appreciable titer of platelet agglutinating factor The difference in the behavior of heterospecific antibody and the platelet agglutinating factor of ITP reflects Coombs' experience in being unable to detect platelet antibody in ITP serums by the mixed erythrocyte-platelet-antiglobulin reaction while being able to detect platelet antibody in rabbit serum This difference may reflect a greater number of available antigenic sites in the platelet for heteroantibody than for homologous antibody, but Coombs has suggested 2 other explanations the thorough washing necessary in both techniques could remove an antibody which coats platelets, or, the platelet agglutinating factor may not be a true antibody and thus would not be visualized by fluorescent technique Since negative results obtained with ITP serums containing platelet agglutinating factor are compatible with either explanation, no conclusion on the immunologic *vs* nonimmunologic character of platelet agglutinating factor can be drawn The immunochemical approach with fluorescent antibody permits localization of platelets in splenic tissue and offers another tool in the study of platelet sequestration sites Serum proteins can be easily removed from platelets by washing, but fibrinogen is not removed from platelets by 10 washings in saline solution

British Medical Journal, London

1 1907-1968 (June 25) 1960 Partial Index

Commonwealth and Common Health A Porritt p 1907
The Mentally Defective Twin J M Berg and B H Kirman p 1911
Etiology of Respiratory Disease W W Holland and others p 1917
Staphylococcal Infection in a Medical Ward R A Shooter and others p 1923
Staphylococcus Pyogenes K Anderson and others p 1925
*Control of Staphylococcal Infection B D Corner and others p 1927
*Acute Appendicitis in Pregnancy W P Black p 1938

Control of Staphylococcal Infection—A new technique in the care of the skin and umbilicus of newborn infants was instituted in a large maternity hospital where clinical staphylococcal infection had remained at a high level for several years (1) At 6 hours after birth the cord is ligated ¾ in (2 cm) from the umbilicus and incised, and the whole stump and surrounding skin are sprayed with an antiseptic plastic solution (octaflex) (2) Hexachlorophene is then applied liberally to the trunk, particular care being taken to treat the umbilicus, groin, perineum, and axilla (3) The cord and napkin are subsequently powdered whenever the napkin is changed, and the trunk is powdered once daily with the routine change of nightgown There was a striking and sustained fall not only in the incidence

of staphylococcal sepsis of the skin among the infants but also in the number of mothers who developed breast abscesses This improvement was most pronounced in the premature baby unit where the incidence of minor sepsis has always been a problem The treatment is simple to carry out and the cost is moderate

Acute Appendicitis in Pregnancy —Twenty-five women who had acute appendicitis during pregnancy are reported One maternal death occurred there were 5 abortions and 4 premature labors with 3 neonatal deaths Twenty-four patients were subjected to appendectomy and 1 to drainage of an appendiceal abscess From the literature 348 cases of acute appendicitis in pregnancy were reviewed Appendicitis does not appear to be more frequent in gravid women than in non gravid women, being commonest under the age of 30 years during the first and second pregnancies and arising with about equal incidence in each trimester Increasing maturity of pregnancy adversely affects the severity of appendicitis, and diagnosis is more difficult the nearer the patient is to term Fetal mortality is related to the severity of the appendicitis rather than to the duration of pregnancy Previous appendicitis with adhesions will adversely affect the prognosis of subsequent appendicular inflammation in pregnancy The treatment of choice is appendectomy which diminishes risk of the pregnancy terminating prematurely A carefully performed abdominal operation, not involving the uterus should not cause abortion or premature labor

Canadian Medical Association Journal, Toronto

83 99-142 (July 16) 1960 Partial Index

*Recurrent and Bilateral Renal Calculi
Y R Reddy p 99
Hepatitis Caused by Glipasol
T W Davis R B Kerr and A Bogoch p 102
Xylose Blood Level as Index of Intestinal Absorption
J G Roberts and others p 112
Pulmonary Tuberculosis in Diabetic Patients
O T Cheung p 118

Recurrent and Bilateral Renal Calculi —The author reports on 238 patients with evidence or history of renal calculi who were seen at St Boniface Hospital, Winnipeg Manitoba, Canada The observations made on these patients justify the following conclusions Nine per cent of patients with a stone in one kidney also have a stone in the other kidney when first examined Of patients who have a stone, a recurrence develops in the same or the opposite kidney in 9 5% Of all patients studied who had recurrent or bilateral renal calculus disease, 46% had sterile urine cultures i e, there was no evidence of infection There was no demonstrable causation of the disease in 82% of patients Support for the concept that renal lithiasis is probably a bilateral renal disease is indicated by the fact that there are as many recurrences of renal calculi in the contralateral as in the ipsilateral kidney The formation of calculi is not simply a question of precipitated crystals falling out of a supersaturated urine These crystals have to adhere to each other to form stones Evidence suggests that the crystals must be stuck together by a binding substance (mucoprotein) in order to form stones Since the mucoprotein possesses a very high molecular weight, it seems unreasonable to consider that its presence in the urine is the result of filtration through the glomerulus or of secretion or excretion by the renal tubule Apparently this mucoprotein is formed within the urinary tract Formation of urinary tract calculi may not be a disease of urine but rather a systemic condition involving the normal connective tissue matrix of both kidneys

Diseases of Chest, Chicago

38 1-116 (July) 1960 Partial Index

*Staphylococcic Pneumonitis in the Postoperative Patient
E H Morgan and others p 1
Role of Steroid Therapy in Tuberculosis
A B Miller p 13
Intravenous Colchicine in Inoperable Bronchogenic Carcinoma
S Cohen and J R Johnson p 30
Tuberculous Peritonitis 34 Cases Diagnostic Aspects
H J Hughes D T Carr and J E Geraci p 42
Tuberculin Skin Reactions and Use of Prednisone
S Bovornkitti and others p 51
Infrapulmonary Pleural Effusion
R A Flaherty and J M Keegan p 56
*Congenital Aneurysms of Aortic Sinuses with Cardioaortic Fistula—S A Kieffer and P Winchell p 79

Postoperative Staphylococcic Pneumonitis —On the basis of observations on 13 patients with postoperative staphylococcic pneumonitis who were observed by the authors during the years 1955 through 1958 among 40,000 admissions to a Seattle hospital, they concern themselves with (1) a description of the clinical features which will aid in early recognition, and (2) the treatment The surgical procedures to which the patients had been subjected included intracranial, facial, thoracic, cardiac, abdominal, urologic, and gynecologic operations The staphylococcic pneumonitis began during the first 3 postoperative days in 10 of the 13 patients The disease must be suspected when a postoperative patient manifests severe respiratory insufficiency, low temperature a prolonged expiratory phase of respirations despite tachypnea and hyperpnea, sanguinopurulent sputum, and leukocytosis In the presence of these signs the diagnosis of staphylococcic pneumonitis should not be abandoned even if there are no confirmatory roentgenographic changes in the lungs A gram stained smear of sputum demonstrating many gram-positive forms of cocci presents sufficient corroborative diagnostic evidence to begin aggressive therapy without delay In view of the probability that the infecting staphylococcus will prove resistant to the usual antibiotics, the authors recommend the prompt use of vancomycin, or ristocetin intravenously Because gross respiratory insufficiency of obstructive type is commonly present in patients with staphylococcic pneumonitis, inhalation of nebulized bronchodilators, the use of intermittent positive pressure breathing devices, and when indicated, tracheostomy have proved their value

Congenital Aneurysms of Aortic Sinuses —Although congenital aneurysms of the aortic sinuses (of Valsalva) are rare, about 70 cases have been reported in the literature The authors include in this report data on 10 patients with such congenital malformations, in whom clinical or autopsy evidence was available at the University of Minnesota Hospitals Rupture of the aneurysm with creation of a cardioaortic fistula occurred in 59 of a total of 78 patients The right ventricle was the most common site of termination (34 cases) The authors point out that a lack of continuity between the annulus fibrosus of the aortic valve and the elastic aortic media is the essential lesion Clinical histories and autopsy findings indicate that a cardioaortic fistula was present at birth in at least 6 cases The unruptured aneurysm is usually relatively asymptomatic, the patient being

aware only of heart murmur or mild dyspnea Rupture of the aneurysm was not, as previously reported, a sudden dramatic event in 9 of the 10 patients observed by the authors Location and quality of the typical continuous murmur heard after rupture differentiate it from that of patent ductus arteriosus Findings on the electrocardiogram and roentgenogram and at cardiac catheterization are reviewed Definite diagnosis can usually be made by angiocardiography or retrograde aortography Successful surgical closure of a ruptured congenital aortic sinus aneurysm has been accomplished in 8 cases within the past 2 years with the aid of cardiopulmonary bypass with a pump-oxygenator and retrograde coronary perfusion Rupture of the aneurysm rarely results in immediate death Usually medical therapy can be continued for several years However, with the availability of a pump-oxygenator, the demonstration of a cardioaortic fistula is an indication for its closure with "open heart" techniques

Helvetica paediatrica acta, Basel

15 115-202 (June) 1960 Partial Index

*Pseudo-Hypoparathyroidism
A Gentili and E Bottone p 115
Eosinophilic Interstitial Pertussoid in Infants—Z Biró p 135
Congenital High Tracheo-Esophageal Fistula of H Type
A Giedion p 155

Pseudo-hypoparathyroidism —Albright's pseudo-hypoparathyroidism is characterized by insensitivity to the therapeutic effect of parathyroid extract, a negative reaction to the Ellsworth-Howard test, and by normal or hyperplastic parathyroids This syndrome is attributed to (1) nonresponse to parathyroid hormones, (2) dyschondroplasia, especially metatarsal and metacarpal, and (3) tendency to calcification in the subcutaneous tissues The patient studied by the authors was a 5-year-old girl in whom convulsive manifestations started in the first months of life and whose blood picture was characterized by hypocalcemia and hyperphosphoremia She was undersized, had a round face, mental retardation, zonular cataract, and slight skeletal calcification. Although these features corresponded to Albright's description, some elements were missing A biopsy specimen from the renal tissue showed tubular alterations with microscopic foci of proliferation and calcium precipitates The authors classify this condition as monosymptomatologic tubular nephropathy according to Fanconi's classification They see in Albright's work the implication that pseudo-hypoparathyroidism is caused by alterations in the renal tubules A classification based on Albright's genetic triad comprising 2 types of pseudo-hypoparathyroidism is suggested a complete form, in which all 3 genetic elements are present, and an incomplete form lacking 1 or 2 elements The designation pseudo-hypoparathyroid tubular nephropathy is suggested to emphasize the renal tubular lesions as the essential feature

Journal of Pediatrics, St Louis

57 1-150 (July) 1960 Partial Index

Growth Disorders Associated with Renal Acidosis
W W McCroy p 5
Growth Failure due to Diseases of Proximal Tubule
H G Worthen p 14
Distal Nephron and Disorders of Its Function
M A Holliday p 23
*Immunizing Properties of Attenuated Measles Virus
J Dolgin and others p 36
*Ocular Reactions in Ophthalmia Neonatorum Prophylaxis
J R Christian p 55

Immunizing Properties of Attenuated Measles Virus —The authors studied the antibody response to administration by the subcutaneous route of live attenuated *Edmonston* strain of measles virus vaccine in 20 children in the pediatric division of the Sea View Hospital, Staten Island, N Y, an institution for the care and treatment of tuberculosis The tuberculosis processes of these children had been stabilized and controlled Children were selected for this study since, because of their age, they might not yet have had measles The antibody content of all serums collected before and after vaccination was determined by the virus neutralization test Eleven children in this group of 20 were considered susceptible to measles because of the absence of neutralizing antibodies in the serum All 11 children had a significant titer of neutralizing antibodies 25 days after the inoculation of attenuated live measles virus The susceptible children had either no symptoms of measles at all after they had been given the vaccine, or they had modified measles with fever, leukopenia, and a faint eruption, unequivocal Koplik spots were not recognized in any None had catarrhal symptoms and none of them appeared toxic No complications occurred The urgent need of a measles vaccine is stressed

Ocular Reactions in Neonatal Prophylaxis —The author reports on 4,292 infants who underwent prophylactic treatment for the prevention of ophthalmia neonatorum not later than 10 minutes after birth at the Newborn Nurseries of Lewis Memorial Maternity Hospital, Chicago between June, 1958, and June, 1959 Of these, 2,359 received 1 to 2 drops of 1% silver nitrate which were instilled into each eye, and 1,933 infants received erythromycin ointment, about a 1 cm strip being used in each eye Ocular reactions developed in 237 (10%) of the 2,359 infants receiving silver nitrate, as compared to 78 (4%) of the 1,933 infants with similar reactions after receiving erythromycin There was no significant correlation of incidence of ocular reactions in either group according to the month of occurrence, sex, race, type of delivery, type of bacteria, or weight of infant Cultures of the 237 patients with ocular reactions in the silver nitrate group were positive in 31 and negative in 206 Of the 78 patients with eye reactions in the erythromycin group, 13 had positive cultures, and 65 revealed no growth Ocular reactions were graded 1, 2, and 3 Five per cent of the silver nitrate group had Grade 1 reactions as compared to 2 5% in the erythromycin group, 4% of the silver nitrate group had Grade 2 reactions as compared to 1 4% in the erythromycin group, and 0 5% of the silver nitrate group had Grade 3 reactions as compared to 0 1% in the erythromycin group The peak incidence of ocular discharge in the silver nitrate group occurred on the 1st day of life, in the erythromycin group the 2nd day of life was the peak period, suggesting the probability of a chemical rather than an infectious reaction in the silver nitrate group

Journal of Urology, Baltimore

84 1-200 (July) 1960 Partial Index

*Appraisal of Kidney Function Tests
K G Wakim p 1
Backflow Patterns in Experimental Hydronephrosis
M Kazmin, L Persky, and J P Storaasli p 10
Pyelorenal Uptake in the Kidney
C H Nicolai p 14

Renal Vascular Hypertension in Children
J P Smith and M L Saylor p 17
Effect of Intermittent Clamping of Renal Pedicle
P J Stueber S Koletsky and L Persky p 26
Calyceal Diverticulum and Butterfly Vertebra
A Schwartz A Pfau and H Weinberg p 32
•Incidence of Urologic Anomalies
C E Carlton Jr and R Scott Jr p 43
•Nephro-Ureterectomy in Unsuspected Hemophiliac
R K Mookini Jr and E F Kelly p 47
Uretero-Ureterostomy for Conservation of Renal Tissue
S H Rothfeld p 60
Structure and Function of Bladder
R T Woodburne p 79
Fistula Between Bowel and Urinary Tract
W E Goodwin and others p 95

Appraisal of Kidney Function Tests—The best way to assess renal function is the repeated use of several tests such as those involving quantitative measurements of the rate of glomerular filtration, effective renal blood flow, fractional excretion of dye, the ability of the kidney to concentrate, and the evaluation of blood urea No single test is adequate for complete assessment of the over-all functional capacity of the kidneys Repetition of the test or tests in the same patient allows comparison of findings, with assessment of the status of the disease and determination of the prognosis

Incidence of Urologic Anomalies—Of 318 children who died and in whom congenital neurologic anomalies were revealed by autopsies at the Texas Children s Hospital and Jefferson Davis Hospital, Houston, Texas 26 (8 2%) were found to have also a significant anomaly of the urinary tract Only 5 (19%) of the 26 patients had findings in the history, physical examination, or urinalysis, which might have drawn attention to the urologic anomaly In the remaining 21 patients (81%), history, physical examination, or urinalysis did not raise suspicion of such an anomaly In all of these patients a screening excretory urogram would probably have drawn attention to the presence of the urologic abnormality The reported data suggest that the presence of a malformation of the urinary tract may be strongly suspected in patients with a primarily recognizable congenital anomaly anywhere in the body, and that a complete urologic history physical examination, urinalysis, and excretory urographic study will reveal urologic processes that might otherwise go undetected

Nephro Ureterectomy in Unsuspected Hemophiliac—The authors report on a 63-year-old man who was an unsuspected hemophiliac and was subjected to a successful nephro-ureterectomy for an ureteral tumor at the Veterans Administration Center, Dayton, Ohio Three units of blood were administered during the operative procedure in the course of which there was no undue amount of bleeding On the 3rd postoperative day, a profuse amount of bleeding was noted from the operative site and the hemoglobin level was 9 Gm with a hematocrit volume of 31% Reexploration through the original incision revealed generalized ooze involving skin, muscles, and tissues of the retroperitoneal space No active spurters were seen and at the termination of the procedure it became certain that one was dealing with a coagulation disturbance as the wound continued to bleed Successful management during 3 weeks of active bleeding included the use of 34 units of fresh blood and 49 units of 100 cc of lyophilized plasma containing antihemophilic globulin The administration of lyophilized plasma was continued for 1 week after all bleeding had stopped. Attention is directed toward the high mortality in hemophiliacs undergoing major intra-abdominal surgical intervention

Khirurgiya, Moscow

36 1-144 (June) 1960 Partial Index

•Focal Surgery of Tuberculous Spondylitis
P G Kornev p 7
Surgical Treatment of Scoliosis
L I Shulutko p 13
Surgical Treatment of Injuries of Spine and Spinal Cord
V D Golovanov p 17
Colimycin and Vitamins in Staphylococcal Infection
I G Rufanov and N V Galanova p 23
•Rational Use of New Antibiotics in Surgery
V I Struchkov and A M Marshak p 28
Plastic Resection of Hip Joint in Tuberculous Affection
N P Novachenko p 33

Focal Surgery of Tuberculous Spondylitis—At the Leningrad Institute of Surgical Tuberculosis the radical trend in treating spondylitis involves removal of a necrotic focus from the body of an affected vertebra Three types of operation are employed (1) early, radical, prophylactic procedure in the presence of isolated foci, (2) extensive procedure in well-pronounced forms of spondylitis, and (3) late, atypical procedures to eliminate the sequelae of the disease As a supplementary measure a subsequent osteoplastic fixation of the vertebra follows In the period 1955 to 1959, 415 operations were performed on patients with spondylitis Of these, 265 consisted of necrectomies on the vertebral bodies There was only one death consequent upon the operation itself The results of focal operations are particularly favorable in that they make it possible to achieve a complete recovery more frequently and in a shorter period of time than is possible with conservative methods of treatment

Rational Use of New Antibiotics in Surgery—On the basis of employment of wide-spectrum antibiotics in more than 500 surgical patients the authors are of the opinion that untoward reactions could be reduced if the preparations are introduced parenterally Parenteral administration of tetracyclines produces a higher concentration of the preparation in the blood with lower doses, there is an especially high concentration in the lung tissue, including areas subject to inflammatory changes In order to increase the effectiveness, combined routes of administration should be favored (local and parenteral), along with a combination of antibiotics of the tetracycline series with levomycetin, ACTH and sulfanilamide preparations The authors bring up the question of creating reserve antibiotics for use against resistant strains of Staphylococcus Erythromycin is advocated as such a preparation A rational use of antibiotics sharply reduces the number of complications due to antibacterial therapy and elevates the efficacy of the latter

Lancet, London

1 1359-1422 (June 25) 1960 Partial Index

Medicine in Its Setting
D Hubble p 1359
Further Remarks on the Function of the Basal Ganglia
J P Martin p 1362
Subdural Hematoma
W McKissock A. Richardson and W H Bloom p 1365
•Mental Abnormalities Following Subdural Hematoma
F L Davies p 1369
Unsuspected Treatable Organic Dementia
F Pygott and D F Street p 1371
•Pulmonary Alveolar Proteinosis
G F M Hall p 1383
•Pulmonary Alveolar Proteinosis
G E G Williams and others p 1385

sample was subsequently determined No abnormal cells were isolated from the blood of 3 patients with histological diagnoses of benign lesions or from that of 2 patients with epidermoid carcinoma of the cervix and carcinoma in situ of the cervix, respectively Cancer cells were isolated from blood samples drawn from 4 of the remaining 5 patients with a histological and cytological diagnosis of malignant disease involving the endometrium In 3 of these patients the cancer cells were observed only during curettage, but none were found before or within minutes afterward Whether the entrance of the cancer cells isolated during curettage was the result of a dislodgment of cancer cells which had invaded uterine veins or of a mechanical intravasation into disrupted venous sinuses is not known The reported data suggest that the vascular dissemination of cancer cells during curettage is more than a theoretic possibility in patients with malignant diseases involving the endometrium

Edema of Arm After Radical Mastectomy —A swollen arm was observed in 57 5% of all the patients seen at the Lahey Clinic, Boston, who had radical mastectomy in 1958 Of the patients referred for roentgen ray therapy after radical mastectomy, 85% had postoperative swelling of the arm, 45% of this group had swelling of the arm before roentgen ray treatment was started Clinical examination raised the suspicion of thrombophlebitis as a factor in the cause of the lymphedema and it was confirmed by 5 abnormalities revealed by the venogram, i e, (1) obstruction, (2) a filling defect in the lumen of a vein, not obviously an artifact, (3) filling of collateral veins, (4) retrograde filling of veins, and (5) slow emptying The concept has been proposed that edema of the arm after radical mastectomy is caused by thrombophlebitis with concomitant obstruction of the lymphatics in the vascular sheath The condition is analogous to the familiar postoperative or postpartum phlegmasia alba dolens of the leg The importance of its recognition lies in the possibility of prophylaxis and treatment by anticoagulants and clot solvents that are now available Edema of the arm is most often seen in the immediate postoperative period When it occurs later, recurrent thrombophlebitis is the cause more often than recurrent cancer

Pyelographic Study of Ureteric Injuries —The authors performed intravenous pyelograms before and after surgical intervention for benign uterine conditions in 200 women who had hysterectomy performed at the Maimonides Hospital, Brooklyn, N Y Total hysterectomy was performed in 171 patients, vaginal hysterectomy and vaginal plastic in 19, subtotal abdominal hysterectomy in 8, subtotal abdominal hysterectomy and vaginal plastic in 1, and total abdominal hysterectomy and vaginal plastic in 1 Sodium diatrizoate (Hypaque), the contrast medium used in the pyelographic study, was secreted in sufficient quantity and concentration for accurate delineation of the entire urinary tract in almost every patient The preoperative pyelograms revealed an unsuspected high incidence of abnormality of the urinary tract In 41 of the 200 patients varying degrees of hydronephrosis were revealed which reverted to normal in 37 after hysterectomy The postoperative pyelograms showed that the ureter was injured 5 times, an incidence of 2 5%, as a direct result of the operation The injuries were detected after 3 abdominal hysterectomies and 2 vaginal hysterectomies The right ureter was injured twice and the left 3 times The ureteric injuries sustained were asymptomatic and would not have been discovered without the use of pyelography

Zeitschrift f d. gesamte innere Medizin, Leipzig

15 507-554 (June 1) 1960 Partial Index

Oxymetric Investigation and Treatment in Angio-organopathies H Heller p 520
Serum Calcium Content and Relative Duration of QT Wave W Kaiser, H Krosch and W Ponsold p 527
*Acute Benign or Idiopathic Pericarditis H Krosch p 535
*Clinical Aspects of Pseudohemophilia 6 Cases P Weller p 545

Acute Benign or Idiopathic Pericarditis —The 2 patients with acute, benign or idiopathic pericarditis presented were men, aged 29 and 36, respectively In the first patient myocardial infarction was thought of because of sudden, severe precordial pains radiating to the left shoulder and a family history of coronary thrombosis Pericarditis was indicated by the fact that the patient's discomfort increased when he reclined and when he took a deep breath A pericardial friction rub was not persistent The patient was treated symptomatically and felt better after one week, he was discharged after 3 weeks In the 2nd patient the sudden anginal pain under the sternum radiated toward both costal arches Otherwise the symptoms, treatment, and results were similar to those in the 1st patient Reviewing the literature on acute benign pericarditis, the author directs particular attention to the 1942 report by Barnes and Burchell of the Mayo Clinic The various descriptive terms applied to this form of pericarditis indicate the acute onset, the failure to demonstrate a causal organism, the favorable prognosis, and a tendency to recurrences The importance of the early differentiation from cardiac infarction is emphasized, particularly because the use of anticoagulants in benign pericarditis may result in fatal cardiac tamponade Because the recent literature has supplied etiological explanations in some cases but has also described unfavorable courses, the author feels that the terms "idiopathic" and "benign" do not apply to all cases of this form of pericarditis

Clinical Aspects of Pseudohemophilia —Pseudohemophilia is not strictly defined as regards symptomatology, pathophysiologic processes, the physiology of coagulation, nor as regards nomenclature The following defects occur singly or in various combinations vascular impairment, thrombocytic defects, lack of plasma factors that form thromboplastin Observations on 6 patients with thrombopathy (pseudohemophilia, angiohemophilia), ranging in age from 15 months to 44 years, are tabulated and the clinical manifestations, the course, and the chief combinations of defects are described and discussed The author suggests that the defects occur more frequently than can be assumed on the basis of clinical manifestations The various forms differ greatly, and often the clinical manifestations are only rudimentary The problems that are created by the occurrence of sporadic forms are discussed, and it is pointed out that exogenic factors are not likely to cause the multiple defects, and that even in the supposedly sporadic cases some constitutional predispositions may exist, or that several defects depend on the same superimposed factor, which in turn is influenced by an external noxious influence In commenting on the nomenclature the author admits that it is partly inappropriate and partly incomplete, but it is extremely difficult to find a suitable term for these very complex disturbances, and really not necessary To replace one inadequate term with another which is also inadequate is inadvisable, and to have several terms for one condition is even more confusing than to have a somewhat inadequate term

WASHINGTON NEWS

Recommend More FDA Power
Kennedy on Health
Doctor Draft
Vitamin Company Accused
Miscellany

MORE POWER SOUGHT FOR FDA

A committee of physicians and scientists proposed that the Food and Drug Administration be given authority to test the effectiveness as well as the safety of all new drugs

This was the most sweeping proposal of 11 recommendations by the advisory group which was established to investigate charges against the FDA by the Senate Antitrust subcommittee headed by Sen Estes Kafauver (D , Tenn)

The eight-member advisory committee, in general, cleared the agency of the charges, concluding that it found in FDA's inspection of new drugs "no evidence of disregard for the public health, and that appropriate action had been taken when hazards were established by subsequent clinical experience "

At the same time, the committee said, certain weaknesses inherent in the existing law and current staffing and budgetary support hamper the FDA in its task of protecting the public health '

In proposing an efficacy test power by FDA, the committee asserted that treatment of a patient with an ineffective drug in place of an effective one may jeopardize his recovery

There has been some strong controversy over this proposal, with opponents arguing that Therapeutic responsibility would then be transferred from the physician to the Federal Government

Arthur S Flemming, Secretary of Health, Education, and Welfare concurred in all of the group s recommendations except one that he said would require further study That proposal called for coordination of the supervision of labeling and promotional material and advertisement of drugs Flemming said this would probably require legislation to make a single agency responsible for this work, now handled by FDA, the Federal Trade Commission, and the Post Office Department

Other recommendations

1 Require manufacturers of new drugs to maintain records and submit reports of clinical experience not only before but after the drug is released for sale

2 Require certification procedures for all antibiotics

3 Strengthen FDA inspection procedures

4 Establish an advisory organization of scientific and technical experts as a recognized resource for advice or criteria, procedures, and policies of FDA

Members of the committee, headed by Dr C Phillip Miller, Professor of Medicine at the University of Chicago, included Dr John H Dingle, Professor of Preventive Medicine, Western Reserve University School of Medicine, Dr Maxwell Finland, Associate Professor of Medicine, Harvard Medical School, Dr Colin M MacLeod, Professor of Medicine, New York University, College of Medicine, Dr Karl F Meyer, Director Emeritus, George Williams Hooper Foundation, University of California Medical Center, San Francisco, Dr John R Paul, Professor of Preventive Medicine, Yale University School of Medicine, Dr Carl F Schmidt, Professor of Pharmacology, University of Pennsylvania School of Medicine, and Dr Wesley W Spink, Professor of Medicine, University of Minnesota Medical School

KENNEDY SPELLS OUT DEMOCRATIC HEALTH GOALS

Sen John F Kennedy (D , Mass) presented his health program calling for expanded federal spending for medical research, hospital construction, rehabilitation activities, and medical scholarships

The Democratic Presidential candidate's program differed chiefly from that of Vice President Nixon in their approaches to health care of the aged Kennedy renewed his call for a compulsory government insurance program under the Social Security System, while Nixon has backed the voluntary program of helping those who need assistance that was approved by Congress this year

Though both called for stepped-up spending in other health fields, neither specified how much money they thought should be provided The Democratic Congress in recent years has consistently upped the Administration s budget proposals for health programs

In a speech at Warm Springs, Ga , a week after Nixon had made public his health plan, Kennedy proposed the following

1 Federal grants for the construction, expansion, and modernization of medical schools, dental schools, and schools of public health This will require at least 20 new schools as well as expanding present facilities

2 Loans and scholarships for medical students Low interest loans and fellowships must be made available by the federal government—converting them into scholarships for those willing to devote

their talents to fighting disease in the underdeveloped nations—for which we need a new world health center—and those willing to devote their talents in this country to those rural and other areas with a lack of doctors"

3 Grants for renovating our older hospitals The Hill-Burton Act has been responsible for the construction of new hospitals with some 200,000 beds "Most of our older cities have older hospitals which could be renovated, modernized, and expanded to help meet the load—and grants for this purpose, along with research into improved hospital operation and administration, could bring the cost and the shortage down at the same time"

4 Long-term grants for increased medical research, including basic research—not only more money but longer commitments so that experiments can be planned and equipment bought

5 Expanded efforts for rehabilitation

Meanwhile, Nixon charged that Kennedy's performance record on medical care for the aged is "up to bat three times, struck out three times"

Nixon said his own plan for voluntary medical insurance has "a number of advantages" over Democratic proposals while Kennedy, the Democratic Presidential nominee, "offers only an empty promise three times rejected" by Congress

Nixon said the Democrats advocate compulsion in medical care And, "even if the way of compulsion were the right way, all my opponent does about the subject is talk"

Nixon said Kennedy-backed programs have three times failed to win Congressional approval and "a month ago he completely failed to persuade the Congress controlled by his own party to pass this or any other points of the program he now promises for the people"

The GOP nominee said, "my conviction is that the American people don't want, and I don't believe they will allow, anyone to jam compulsory insurance down their throats"

DOCTOR DRAFT POSSIBLE

The Defense Department said it may have to seek a draft of physicians next spring unless more volunteers are forthcoming

At present, a department spokesman said, it appears there might be a shortage of some 500 physicians for the services However, he added that this number probably will decline between now and March with more volunteers signing up Unless the present rate of volunteers is stepped up, he said, a draft may be necessary

No physicians have been drafted since 1957, one reason for the slackening in volunteers among interns and residents, according to the spokesman

Final decision on the matter will be made March 1

LARGE VITAMIN FIRM CHARGED

The nation's largest door-to-door seller of vitamin and mineral food supplements was ordered by the Federal Trade Commission to discontinue making alleged unlawful exclusive dealing agreements with distributors of its "Nutrilite Food Supplement"

The FTC's order also requires the company, Mytinger & Casselberry, Inc, Long Beach, Calif, to stop making "deceptive" interpretations of a consent decree issued against it in 1951 by a U S District Court

Sales of Nutrilite exceeded $19 1 million in 1958, according to the agency, 62 percent of housesales of vitamin concentrates for that year and 35 percent of all vitamin concentrates for that year and 35 percent of all vitamin-mineral sales

The FTC said it was unlawful for the company to demand that its 80,700 distributors "agree not to sell any other vitamin or mineral products" while handling Nutrilite

At the same time, the agency said the company was using the 1951 court decree as a "sales tool" to make people believe Nutrilite had received the endorsement of the U S Government Actually, according to the FTC, under the consent decree the company agreed to stop claiming Nutrilite was good for 54 diseases The court permitted certain other claims for Nutrilite, but these "constitute facts on vitamins applicable to any product containing the vitamins and minerals present in Nutrilite"

MISCELLANY

Persons over 65 years average 6 5 physician visits a year, compared with five visits for persons 45 to 54 years of age, according to a National Health Survey covering some 235,000 elderly The survey, which dealt with noninstitutionalized persons, reported that persons in the over-75 age group averaged 7 3 physician visits yearly Other health statistics released by the government health survey showed that 77% of persons 65 years and older in the United States had one or more "chronic conditions" ranging from hay fever to more serious conditions such as diabetes This compares with 56% in the 45-54 category No effort was made to relate the chronic condition to degree of disability The number of bed-disability days per year was 11 6 for the 65-74 age group, 9 3 days for the 55 64, and 6 4 for the 45-54 The 75 and over group averaged 19 4 days a year Thirteen per cent of the entire U S population—or an estimated 22 million persons—are edentulous (toothless) The proportion of the edentulous ranges sharply upward from about 10% at age 40 to 66% at age 75 and over The prevalence of diabetes in the United States is 1 5 million cases, or nine per 1,000 population

The U S Public Health Service in early October said the 1960 polio season may have reached its peak and started to taper off The service said 178 new polio cases were reported in the week ending Oct 7, 120 of them paralytic This compared with 201 the week before, with 131 of them paralytic This was the largest number for any single week of 1960 This year's total number of polio cases reported throughout the nation was 2,303 compared to 6,332 for the same period last year

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SUPPLIED Aldactone is supplied as compression coated yellow tablets of 100 mg

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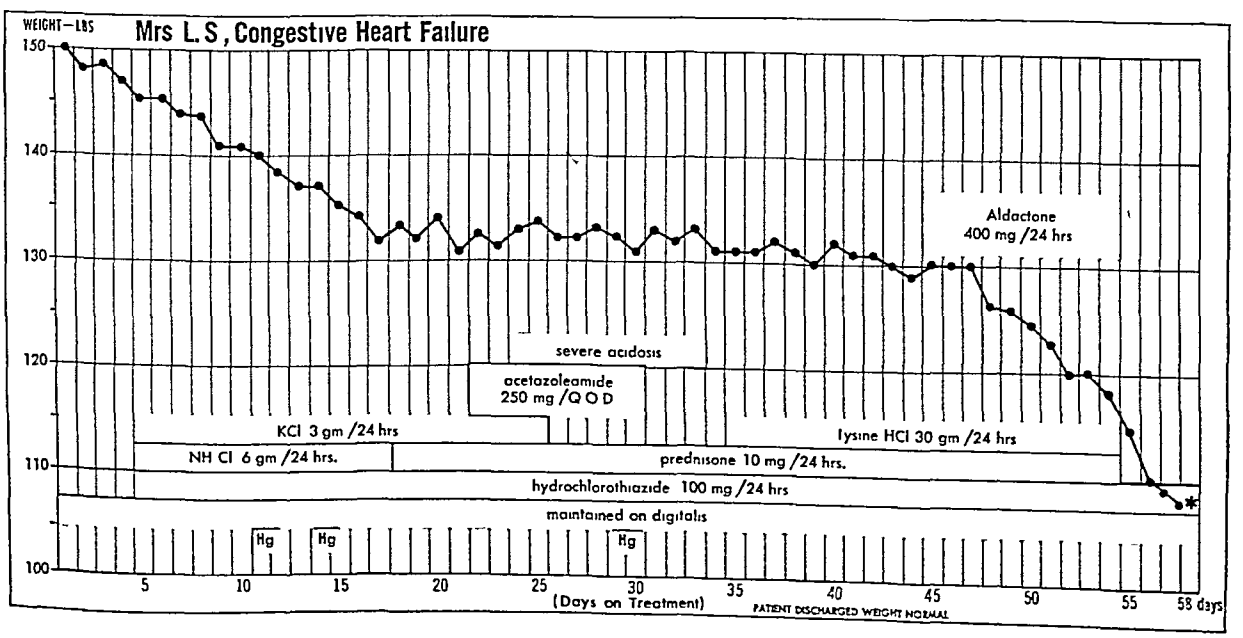

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For neuralgias, dysmenorrhea, upper respiratory distress and postsurgical conditions—new compound of Soma, phenacetin, caffeine kills pain, stops tension, reduces fever—acts fast, relief lasts four to six hours.

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MEDICAL NEWS

ARIZONA

Heart Specialists to Confer in Phoenix—Speakers at the 4th annual cardiac symposium to be held at the Arizona Biltmore Hotel, Phoenix, Jan 27-28, will include four heart specialists Dr Paul D White, of Boston, founder of the American Heart Association and consultant to President Eisenhower during his heart illness, Dr E Grey Dimond, director of the Institute for Cardio-Pulmonary Diseases, Scripps Foundation, La Jolla, Calif, and president-elect of the American College of Cardiology, Dr Robert E Gross, surgeon-in-chief of the Children's Hospital, Boston, Ladd Professor of Children's Surgery, Harvard Medical School, and one of the pioneers in open heart surgery, and Dr Watkins P Harvey, director of the division of cardiology, Georgetown University Medical Center, Washington, D C This symposium is a part of the professional education program of the Arizona Heart Association and all physicians are urged to register early at the Heart Office, 2816 N 16th St, Phoenix, or 1842 E Broadway, Tucson Dr Leslie B Smith, Phoenix physician, is chairman of the program committee

CALIFORNIA

UCLA Professor to Visit Japan and Indonesia—Dr Charles M Carpenter, professor of infectious diseases at the University of California, Los Angeles, has been granted two months leave He will visit Japan for two weeks and present a report of his cancer research to a meeting of the International Union against Cancer in Tokyo He will also give lectures at Sapporo University in Hokaido, at Yonsei University in Seoul, Korea, and at the University of Madrid, Spain One month will be spent in Indonesia, in collaboration with Dr Raymond B Allen, director of the Indonesian Mission of the International Cooperative Agency, to survey a medical school infectious disease program at Airlangga University, Surabaja The University of California is interested in bringing modern medicine to Indonesia where at present there is only one doctor for each 60,000 persons Returning via Spain, Dr Carpenter will confer with the Minister of Health concerning previous brucellosis studies which he initiated in that country

CONNECTICUT

Sesquicentennial Celebration at Yale—Yale University School of Medicine will celebrate the Sesquicentennial Anniversary of the Founding of the Medical Institution of Yale College Oct 28-29 After welcoming remarks by A Whitney Griswold, Ph D, president of the university, Abraham A Ribicoff, Governor of the State of Connecticut, and representatives of the Connecticut State Medical Society, the American Medical Association, and the Association of American Medical Colleges, an address will be given by Sir Howard Florey, F R S, professor of pathology at the University of Oxford, England, who will present "Medical Science in the Twentieth Century" The following faculty members are scheduled to speak at the afternoon session

Dr Vernon W Lippard, Medical Education at Yale in the Twentieth Century
Dr Averill A Liebow Medical Research at Yale in the Twentieth Century
Dr Cyril N H Long, Medical Science and the Future
Dr Paul B Beeson, Clinical Medicine and the Future

On Oct 29 Dr Lloyd G Stevenson, Montreal, dean of the faculty of medicine, McGill University, will speak on Medicine in the Nineteenth Century," and Whitfield J Bell Jr, Ph D, New Haven, research associate in history, will present 'The Medical Institution of Yale College in the Nineteenth Century" The occasion will include several special exhibitions

DISTRICT OF COLUMBIA

NIH Seek Patients for Clinical Study—The National Institutes of Health are soliciting the help of physicians to obtain patients with a wide variety of conditions currently under intensive clinical study Each of the institutes needs a limited number of patients Patients with a diagnosis meeting the requirements of a particular study will be admitted on the basis of a physician-referral Physicians are kept informed of the treatment and progress of their patients and are at liberty to visit them Patient costs, with the exception of transportation, are covered by the NIH Physicians wishing to refer patients should communicate with clinical directors of the individual institutes or Dr Jack Masur, director of the NIH Clinical Center, Bethesda 14, Md, from whom full details of the studies for which patients are sought may be obtained

GEORGIA

Child Psychiatry Services at Emory—The development of a child psychiatry section within the department of psychiatry of Emory University was announced by Dr Arthur P Richardson, dean of the school of medicine Two child psychiatrists, Dr Richard S Ward, from New York City, and Dr James C Flanagan, from Galveston, Texas, have joined the full-time staff of the medical school Dr Richardson said that emphasis will be laid on the training of child psychiatrists 'who will be desperately needed as our mental health program expands" Emphasis will also be laid on research into the development of emotional problems in children, and the origin of neurotic disorders One of the first steps in the Emory program will be the opening of a child psychiatric clinic sometime this

fall Dr Flanagan has joined the staff as assistant professor of psychiatry He was formerly assistant professor of psychiatry and pediatrics at the University of Texas Medical Branch, and director of the Child Guidance Clinic Dr Ward is associate professor in psychiatry He has been clinical director of the Child Guidance Institute of the Jewish Board of Guardians, and instructor at the Psychoanalytic Clinic of Columbia University

ILLINOIS

Increase in Adoptions Reported—The number of adoptions in the state continues to increase, Dr Leroy L Fatherree, Joliet, director of the Illinois Department of Public Health, reported Sept 9 According to reports received by the department, 6,199 adoptions were handled through Illinois courts in the fiscal year ending June 30 Again, boys were more popular than girls, and almost 85% of the children were adopted prior to age 10 About one-third of the adopted children went into homes where there were other children At least 12 of this group went into homes where there were already 8 or more children Effective Jan 1 of this year, the adoption law of Illinois permits the adoption of adults, and there were 56 persons over age 20 for whom notices of adoption were received

Chicago

Appoint Pharmacology Chairman at Northwestern—Dr Joseph A Wells, professor of pharmacology since 1950 at the Northwestern University Medical School, has been named chairman of the school's pharmacology department Dr Wells received his Ph D, bachelor of medicine, and M D degrees from Northwestern He was first a departmental assistant in pharmacology in 1938, an instructor in 1941, an associate in 1944, and was promoted to assistant professor of pharmacology at Northwestern in 1946 Dr Wells currently serves as treasurer of the Illinois Society for Medical Research He is past-president of the Illinois section and past-associate editor of the *Proceedings of the Society for Experimental Biology and Medicine*

Personal.—Merrill Stafford Read, Ph D, became director of nutrition service for the National Dairy Council, Chicago, Aug 15 Dr Read replaces Zoe E Anderson, Ph D, former NDC director of nutrition research, who resigned on June 1 Dr Read comes to the National Dairy Council from Virginia Polytechnic Institute, where he has since last year been visiting professor in the department of biochemistry and nutrition From 1956 to 1959, he served as chief of the Irradiated Food Branch, U S Army Medical Research and Nutrition Laboratory, at Fitzsimons General Hospital in Denver—Dr Kurt Stern, associate professor of pathology, Chicago Medical School, and assistant director, Mount Sinai Medical Research Foundation, was named recipient of the Dr Morris L Parker Award for Meritorious Research in experimental cancer, blood groups, and blood transfusions The award carries an honorarium of $500

Research in Blood Diseases—The Hematology Research Foundation invites applications for grants-in-aid for hematologic research for a period of one year Applications must be submitted not later than Nov 25 to the Hematology Research Foundation, 127 N Dearborn St, Chicago 2 Awards will be announced by the medical advisory board They will only consider grants up to $3,500 and preference will be given to applicants from the Chicago region, unless it is an application of some unusual promise The board will make the awards on the basis of the proposed research project Nine copies of applications are requested Application forms are available on request

Dr Bennett Named Division Dean—Dr Henry S Bennett, immediate past-president of the American Association of Anatomists, has been appointed dean of the division of the biological sciences at the University of Chicago Dr Bennett is chairman of the department of anatomy at the University of Washington in Seattle The division of the biological sciences is the largest of the four academic divisions directing graduate education and scientific research at the University of Chicago The appointment of Dr Bennett was announced Oct 5 by R Wendell Harrison, acting chancellor of the University of Chicago His appointment is effective Jan 1, 1961 Dr Bennett will succeed Dr Lowell T Coggeshall, who held the biological sciences deanship for 13 years Dr Coggeshall was appointed vice-president for medical affairs of the University of Chicago in March, 1960 An alumnus of the Harvard Medical School, where he also served on the faculty, Dr Bennett has been a member of the National Advisory Health Council to the United States Public Health Service He taught at Harvard University from 1937-1942, attaining the rank of associate professor of anatomy and instructor in pharmacology In 1948, Dr Bennett was appointed professor and chairman of the department of anatomy at the University of Washington in Seattle

MARYLAND

Faculty Appointment—The appointment of Dr Irving Leopold as professor of ophthalmology in the Johns Hopkins University School of Medicine has been announced Dr Leopold, who will assume his new position on Jan 1, 1961, received his medical degree in 1938 and his doctor of science degree in 1943 from the University of Pennsylvania He received successive appointments in the Graduate School of Medicine as assistant professor, associate professor, and, in 1955, full professor and head of the department of ophthalmology Dr Leopold is editor-in-chief of the *Survey of Ophthalmology* He has held several other editorial positions, including associate editorship of the *Archives*

of Ophthalmology from 1950-1953 He is a consultant to the National Institutes of Health, the American Foundation for the Blind, National Multiple Sclerosis Society, and the National Council to Combat Blindness Dr Leopold is the recipient of five national awards for his work in ophthalmology, the most recent being the 1960 Friedenwald Medal given by the Association for Research in Ophthalmology

MASSACHUSETTS

New Research Building to Open —The new $3,000,000 Boston University medical research building located on the corner of Stoughton Street and Harrison Avenue in Boston's South End, first major step in the long-range development program of the Boston University-Massachusetts Memorial Hospitals Medical Center, will be officially dedicated Friday, Oct 28, at 4 P M Federal, state, university, medical school, and hospital officials will participate in formal ceremonies climaxing a day-long program of science sessions at which a panel of medical authorities will evaluate The Role of Research in Medicine" The panel, sponsored by the University Medical Alumni Association, and the Hospital Medical-Surgical Society in concert with its second annual scientific meeting, will be held from 10 A M to 1 P M Friday at the School of Medicine The seven-story, blue glazed tile research building, providing research areas for the basic science departments and the medical, surgical, and mental health divisions of the medical school, will have over 100 laboratories and a variety of special research facilities, such as low level radioactive isotope counting equipment, electron microscopes, and controlled environment rooms As part of the Boston University over-all development program, the medical research building, adjacent to the university's School of Medicine at 80 E Concord St, Massachusetts Memorial Hospitals, and Boston City Hospital, was financed by the university with a matching grant of $1,500,000 from the United States Department of Health, Education and Welfare under the Federal Health Research Facilities Act President Harold C Case of the university will officiate at the 4 P M dedication ceremonies

MICHIGAN

Statewide Nursing Facility Survey Completed —A study of Michigan's 547 accredited nursing facilities, both private and county-operated, has been undertaken by the University of Michigan School of Public Health under the direction of Kenton E Winter Jr, research associate in the University of Michigan Bureau of Public Health Economics The survey shows that only 24% of the occupants of nursing facilities are admitted directly from general hospitals More than half the patients are women There is a wide variation in cost of nursing facility care in the state, ranging from $25 to $436 per month with an average of $165 Half of all patients are supported entirely by public funds

MISSOURI

Children Donate Teeth for Fallout Study —Children in St Louis are giving their teeth to help the United States Public Health Service in their studies on radioactivity According to the American Chemical Society, atomic fallout accumulation in St Louis is higher than in other parts of the U S Dr Louise Z Reiss, University City, who is in charge of the 10-year study, has collected more than 38,000 teeth in three months and will try to determine the amount of strontium-90 in human teeth and bones at various age levels

NEW YORK

Annual Lecture Given —Dr Alvin I Goldfarb, New York City, delivered the 12th annual Richard H Hutchings Memorial Lecture at the State University of New York College of Medicine in Syracuse on Monday, Oct 3 Dr Goldfarb, a consultant on service for the aged for the New York State Department of Mental Hygiene, discussed 'Psychodynamic Concepts in the Psychiatric Care of the Chronically Ill and Aged' Dr Hutchings, who died in 1947, was an early participant in the psychoanalytic movement in the U S, a former editor of the *Psychiatric Quarterly,* and former superintendent of both Utica and St Lawrence New York State Hospitals He had also served on the clinical psychiatry staff at the Syracuse University College of Medicine, and was professor emeritus at the time of his death

Increase in Venereal Disease —Increases in reported cases of venereal diseases in Upstate New York were noted by the State Health Department for the first six months of 1960 The total number of cases of venereal diseases, 3,122, was the highest in 10 years Early syphilis totaled 245, an increase of 156 cases over the figure for the same period in 1959 There were 164 cases of infectious lesion syphilis reported during the first half of the year compared with 59 last year From January through June 2,051 cases of gonorrhea were reported, an increase of 258 over the number for the same period in 1959 and an increase of 725 (54 7%) over the comparable period in 1950 The report reveals that one out of eight cases of early syphilis is being reported among teenagers, and 68% of the cases occurred among the age group under 30 The report calls for greater emphasis on contact interviewing, tracing, following up of positive blood tests, and prompt reporting of venereal disease infections seen by private physicians

British Physician Honored —Sir Sydney Smith, professor emeritus of forensic medicine at the University of Edinburgh, Scotland, and one of the world's foremost authorities on the scientific investigation of sudden, suspicious, or violent death, was presented with the New York University Medal by Dr George E Armstrong, director of the New York University Medical Center, at a ceremony held

Sept 20 between sessions of the second International Conference on Forensic Pathology and Medicine Sir Sydney achieved world-wide distinction in the practice of forensic medicine during his tenure as principal medico-legal expert for the Egyptian Government and later as professor of forensic medicine at the University of Edinburgh His investigations into criminal cases resulted in the establishment of scientific procedures and methods which helped to make a science of forensic pathology and toxicology Sir Sydney served as dean of the faculty of his university and subsequently was named rector of the institution In 1955 the university bestowed upon him the honorary degree of doctor of laws He was named a Companion of the British Empire in 1944 and was knighted by his monarch in 1949

New Environmental Health Services Appointment —The appointment of Meredith H Thompson, Dr Engr, of Troy, as assistant commissioner for Environmental Health Service in the State Health Department has been announced by Dr Herman E Hilleboe, Albany, State Health Commissioner Dr Thompson's annual salary is $14,580 The Division of Environmental Health Services was established under a recent reorganization of the State Health Department The new division includes the Bureaus of Air Pollution Control, Engineering and Sanitation, Radiological Health, and Water Resource Services Dr Thompson, who was director of the former Bureau of Environmental Sanitation, joined the State Health Department in 1938 He received his bachelor of science degree in civil engineering in 1932, his master's degree in civil engineering the following year, and his doctor of engineering degree in 1953 All were received from Rensselaer Polytechnic Institute In 1935 he was appointed district sanitary engineer with the North Carolina Health Department, following which he served as assistant sanitary engineer in the Georgia Health Department Dr Thompson was named junior sanitary engineer in the State Health Department in 1938, and was promoted to assistant sanitary engineer the following year In 1947 he was appointed director of environmental hygiene for the Rensselaer County Health Department He left Rensselaer County in 1951 to become training section chief, Bureau of Environmental Sanitation, in the State Health Department He was named assistant director of the Bureau in 1955, and director in 1959 Dr Thompson is a member of the American Public Health Association, Municipal Public Health Engineers, State Sanitary Engineers, American Water Works Association, and is a past-president of the New York State Public Health Association

New York City

Private Physician's Role in Tuberculosis Control — Three outstanding leaders in tuberculosis control will present a panel discussion on the role of the private physician in eradicating tuberculosis at a meeting of the Medical Society of the County of Queens on Oct 25, at 9 P M Dr William B Tucker, director, Pulmonary Disease Service, Veterans Administration Center Office, Dr H McLeod Riggins, visiting physician, Bellevue Hospital Chest Service, and Bertram J Black, executive director, Altro Health and Rehabilitation Services make up the panel, moderated by Mr Ed Herlihy of the National Broadcasting Company The panelists were all participants in the recent Arden House Conference on Tuberculosis sponsored by the National Tuberculosis Association and the United States Public Health Service Eighteen of the country's leading authorities on tuberculosis were assembled in Harriman, New York, and, with the assistance of the staff members of the PHS and NTA, defined the major gaps in present practices and recommended the future course of action

NORTH CAROLINA

Faculty Appointments —The names of three new faculty members at the University of North Carolina School of Medicine have been announced by Chancellor William B Aycock Their names and the institutions from which they come are as follows Edward Glassman, Ph D, assistant professor of biochemistry and nutrition, City of Hope Medical Center, Duarte, Calif, Dr George P Vennart, associate professor of pathology, Columbia University, and Paul A Obrist, assistant professor of psychiatry, Fels Research Institute, Antioch, Ohio

New Blood Research Laboratory Dedicated —A new research laboratory for the study of abnormalities of the blood, primarily in a colony of hemophiliac dogs which is the only such colony in the world, was dedicated by the University of North Carolina School of Medicine, Sept 25 The new unit is the Francis Owen Blood Research Laboratory located just out of Chapel Hill at the University Lake The laboratory is named after the late Frances Owen, daughter of Mr and Mrs Frederick C Owen of Durham Miss Owen died of leukemia three months after her graduation from Durham High School in 1956 The laboratory is a part of the medical school's Department of Pathology The new $87,000 structure, containing over 5,000 sq ft of space, will be used primarily to house and study the colony of hemophiliac dogs For a number of years a colony of dogs having a disease apparently identical with human hemophilia has been studied by the Department of Pathology By means of transfusions of normal canine blood, the affected "bleeder" dogs have been raised to maturity and it has been possible to establish that hemophilia can also exist in the female Dr Walter R Berryhill, Chapel Hill, N C, presided at the dedication exercises

PENNSYLVANIA

Annual Lecture Scheduled —The 15th annual R R Higgins Memorial Lecture, sponsored by the Nu Chapter of the Phi Delta Epsilon Fraternity, will be

given by Dr Ivan L Bennett Jr, of the Johns Hopkins Hospital, at the University of Pittsburgh School of Medicine on Oct 27 His topic is "On Drawing Conclusions and Taking Things for Granted"

Personal—Dr Ladd E Hoover, Philadelphia, formerly with the Veterans' Administration Hospital at Lebanon, was appointed assistant director of the Student Health Service at Lehigh University, Bethlehem —Dr Joseph B Wolffe, chief of medicine at Valley Forge Heart Hospital and Medical Center, Norristown, and medical director of Wolffe Hospital, Philadelphia, was elected vice-president of the Fédération Internationale de Médecine Sportive at its congress which was recently held in Vienna Dr Wolffe, founder and past-president of the American College of Sports Medicine, was also elected to the FIMS 9-nation executive board This was the first time an American has been elected to a high office in this international group

Philadelphia

New Psychiatric Research Laboratory Established—A recent substantial increase in psychiatric research at the University of Pennsylvania has led to the establishment of the new $206,000 Laboratory for Research in Psychiatry, which was dedicated Sept 30 at the Hospital of the University of Pennsylvania The Laboratory for Research in Psychiatry occupies the second floor of the George Morris Piersol Building of the Hospital It was dedicated to Dr Kenneth E Appel, chairman of the School of Medicine s department of psychiatry since 1953 Funds for construction of the facility were derived from university sources and matched by a grant from the U S Public Health Service

TEXAS

Cardiovascular Research Center Established—Baylor University College of Medicine in the Texas Medical Center has been designated as a major cardiovascular research center by the National Heart Institute of the U S Public Health Service, it was announced by Dr Stanley W Olson, Houston, dean of the College of Medicine This is the first cardiovascular research center to be established in the United States The project is made possible by a large research grant providing initial funds of $262,500 for the first year, $396,350 for the second year, and $491,325 for each of eight additional years for both basic and clinical research studies in this field The new Baylor Cardiovascular Research Center will not be housed in a separate building but will use the resources of its various departments and affiliated hospitals It will devote particular attention to the study of atherosclerosis Principal investigators who will be supervising the development of the research studies are Dr Raymond D Pruitt, Rochester, Minn, professor and chairman of the department of medicine, and Dr Michael E De Bakey, Houston, Texas, professor and chairman of the Cora and Webb Mading department of surgery at the College of Medicine Virtually every major department of the medical school will participate in this research program

Clinical Conference in Dallas—The Spring Clinical Conference of the Dallas Southern Clinical Society will be held March 20-22 at the Statler Hilton Hotel, Dallas The 1961 honor guests will be

Dr C Knight Aldrich, Chicago	Psychiatry
Dr A N Arneson, St Louis	Gynecology
Dr Ramón Castroviejo, New York	Ophthalmology
Dr Ben Eiseman, Denver	Surgery
Dr Gilbert B Forbes, Rochester, N Y	Pediatrics
Dr French K Hansel, St Louis	Otolaryngology
Dr Philip J Hodes, Philadelphia	Radiology
Dr F Ray Keating, Rochester, Minn	Endocrinology
Dr Philip Knapp, New York	Ophthalmology
Dr John R Moore Philadelphia	Orthopedic Surgery
Mr Joseph McElligott, New York	Medical Management
Dr Myron Prinzmetal, Beverly Hills, Calif	Cardiology
Dr Ralph A Reis, Chicago	Obstetrics-Gynecology
Dr John J Shea, Jr, Memphis, Tenn	Otolaryngology
Dr Maus W Stearns Jr, New York	Proctology
Dr Owen H Wangensteen, Minneapolis	Surgery
Dr Cecil J Watson, Minneapolis	Medicine
Dr Willet F Whitmore, New York	Urology

For information, write the Dallas Southern Clinical Society, 433 Medical Arts Building, Dallas, Texas

GENERAL

Symposium on Gugliemo's Disease—The Hematology Research Division of the Bertha Hearst Foundation, Inc, will publish a symposium on Gugliemo's disease (preleukemic and leukemic phases) Clinical cases for inclusion in that publication are requested For information, write Dr Bella R Hearst, director, Bertha Hearst Foundation, Inc, 55 E Washington St, Suite 1646, Chicago 2

Millions Have Health Insurance—More than 127,000,000 Americans (72% of the civilian population) had health insurance at the end of 1959, an increase of 4 8 million over 1958, according to the results of the annual survey on the extent of voluntary health insurance coverage in the United States carried out by the Health Insurance Council A grand total of $5,175,000,000 in health insurance benefits was distributed during 1959, a 10 9% increase over 1958

Surgeons Name Executive Director—Rear Admiral Walter F James has been appointed executive director of the International College of Surgeons Dr James received his M D from the College of Medicine, University of Illinois, in 1926, the same year in which he was commissioned in the Navy Medical Corps He then did graduate work in bronchoscopy and esophagoscopy at the University of Pennsylvania, Jefferson Medical College, and Temple Medical School, and in surgery at the Mayo Clinic and the Philadelphia Naval Hospital He was promoted to the rank of lieutenant in 1932 and rose through the ranks to become rear admiral in 1953

Outbreak of Lymphocytic Choriomeningitis in Cuba—The Anti-Communist Cuban Medical Group, established at Miami, Fla, and composed of numerous Cuban medical doctors who have sought refuge from the communist regime, reports the existence in Cuba of a severe outbreak of lymphocytic choriomeningitis of epidemic character They allege that the epidemic has been caused by the constant arrival of Russians and Chinese without control or sanitary inspection, basing this assertion on the fact that the malady is prevalent in oriental countries and that this is the first epidemic reported in Cuba

Meeting of Southern Thoracic Surgeons in the Bahamas—On Nov 17-19 the Southern Thoracic Surgical Association will hold its seventh annual meeting at the British Colonial Hotel, Nassau, Bahamas, under the presidency of Dr Edgar W Davis, Washington, D C Twenty-six papers are scheduled for presentation, and the scientific program will conclude with an x-ray quiz, "Some Particularly Noteworthy Intrathoracic Tumors," moderated by Dr Joseph W Peabody Jr, Washington, D C The banquet is scheduled for 7 P M, Nov 18 Dr Davis will present the presidential address, "Bronchial Carcinoma—The Great Impostor A Close Look at Its Many Disguises," the morning of Nov 19 Dr Hawley H Seiler, Tampa, Fla, is secretary-treasurer of the association

Medical Clinics Meeting in New Orleans—The 11th annual meeting of the American Association of Medical Clinics was held at the Roosevelt Hotel, New Orleans, Oct 6-8 Dr Russel V Lee of the Palo Alto Medical Clinic, Calif, delivered the presidential address Speaking under the title "Render unto Caesar," he appealed for adequate medical care for all Americans In a luncheon address Dr Alexander Sas-Jaworsky, a veterinarian of Abbeville, La, sounded a call for the mobilization of all America's resources so that the U S may win its "Second War of Independence" A report on a federal survey of group practice in the U S was presented by Dr S David Pomrinse of the U S Public Health Service Dr Harold D Caylor of the Caylor-Nickel Clinic, Bluffton, Ind, became the association's president

Fertility Society Meeting in Las Vegas—The 9th annual meeting of the Pacific Coast Fertility Society will be held at Las Vegas, Nev, Nov 10-13 Guest speakers include

Dr John I Brewer, Northwestern University, Chicago, "Surgical Treatment of Endometriosis" and "Variation of Endometrial Response"

Dr Somers H Sturgis, Harvard Medical School, "Myomectomy or Hysterectomy in the Nulliparous Woman?" and "Ovarian Dysgenesis, Recent Factors in Evaluation and Treatment"

Dr Robert W Kistner, Harvard Medical School, "Management of Endometriosis in the Infertile Patient" and "Histologic Effects of the Newer Progestins in Hyperplasia"

Dr Melvin M Grumbach, Columbia University, "Masculinizing Effects on the Female Fetus of Androgens and Certain Oral Progestins Administered to Pregnant Women," and "Some Aspects of the Pathogenesis of Anomalies of Sex in Man"

For information, write Dr Anah C Wineberg, 3120 Webster St, Oakland 9, Calif

Conference on Disaster Medical Care—The 11th County Medical Societies Conference on Disaster Medical Care, sponsored annually by the A M A Council on National Security, will be held at the Palmer House, Chicago, Nov 4-6 The "A M A Welcome" given by Dr F J L Blasingame, Chicago, will be followed by a series of reports from the Division of Health Mobilization, U S Public Health Service The conference program on Nov 5 will emphasize the necessity for cooperation and integration in planning with the Public Health Service and state and local civil defense agencies After a series of workshop sessions on Sunday morning to consider specific state and local problems and to develop working agreements, the conference will conclude with a luncheon speech by Edward Teller, Ph D, of the University of California For information, write Frank W Barton, Secretary, Council on National Security, American Medical Association, 535 N Dearborn St, Chicago 10

Welsh Physician Named Assistant Director for World Health Group—World Health Organization Director-General Dr Marcolino G Candau, Geneva, announced the appointment of Dr Fred Grundy, Mansel Talbot Professor of Preventive Medicine at the Welsh National School of Medicine, Cardiff, Wales, as a new and fourth assistant director-general of the organization Dr Grundy will officially take up his new duties in 1961 His assistant-directorship was recently created to deal with the organization's expanding activities He will be responsible for the divisions of public health services, health protection and promotion, and education and training Dr Grundy has served on many health committees in the United Kingdom He was chairman of the Health Visitor Training Committee of the Royal Society of Health, vice chairman of the Standing Conference of Health Visitor Training Centres, vice-president, Royal College of Midwives

Heart Association Meeting in St Louis—The 36th annual meeting of the American Heart Association will be held at the Sheraton-Jefferson Hotel, St Louis, Mo, Oct 24-25, immediately after the three-day scientific sessions which will take place in Kiel Auditorium, Oct 21-23 The scientific sessions will commemorate the centenary of the birth of Dr Willem Einthoven, Dutch physiologist, who discovered the mechanism of the electrocardiogram, the opening address will be given by Dr George E Burch, Tulane University School of Medicine The program will include original scientific papers as

well as panel discussions and symposiums The annual dinner on Oct 23 will feature an address by the incoming president, Dr Oglesby Paul, of Chicago A showing of cardiovascular films is scheduled, and scientific and industrial exhibits will be on display in the auditorium For information, write American Heart Association, 33 East 23rd St, New York 10

Industrial Hygiene Meeting in Pittsburgh —The 25th annual meeting of the Industrial Hygiene Foundation will be held Oct 26-27 at the Mellon Institute, Pittsburgh G H Young, Ph D, director of research at the institute, will open the meeting with an address of welcome The program includes the following panel discussions and moderators

- Effects of Food Additives Legislation on Food Technology Anna M Baetjer, Sc D Baltimore
- Emphysema, Pneumoconioses and Compensation, V P Ahearn managing director, National Industrial Sand Association
- Methods of Measuring Work Capabilities of the Individual, Dr J P Hughes medical director Kaiser Aluminum and Chemical Corporation.

Other program topics include Group Insurance—A Mounting Production Cost,' Recent Developments in Industrial Hygiene,' and Fuels and Their Combustion Products" For information, write the Industrial Hygiene Foundation, 4400 Fifth Ave, Pittsburgh 13

Prize Offered by Goiter Association for Essay —The American Goiter Association, Inc, again offers the Van Meter Prize Award of $300 to the essayist submitting the best manuscript of original and unpublished work concerning 'goiter—especially its basic cause" The studies so submitted may relate to any aspect of the thyroid gland in all of its functions in health and disease The award will be made at the annual meeting of the association in the Warwick Hotel, Philadelphia, May 3 6, 1961 A place on the program will be reserved for the winning essayist if he can attend the meeting Where more than one author appears on the manuscript they will be asked to designate a single recipient to receive the award The competing essays may cover either clinical or research investigations, should not exceed 3,000 words in length, and must be presented in English Duplicate typewritten copies, double spaced, should be sent to the Secretary, Dr John C McClintock, 702 Madison Ave, Albany 8, N Y, not later than Jan 1, 1961 Manuscripts that do not conform to these requirements will not receive consideration

Annual Conference on Fire Protection —Fire safety experts from the United States and Canada will meet in Columbus, Ohio, at the forthcoming annual fall conference of the National Fire Protection Association The conference, to be held Nov 14-16 at the Deshler Hilton Hotel, will cover topics ranging from school and hospital fire safety to industrial protection and disaster planning One session will be devoted to such fire department questions as equipment developments, manpower problems, and public education techniques Officials of the international nonprofit fire safety organization will open the conference with a report on trends in fire protection Morning and afternoon sessions of the three-day conference, which is open to both members and nonmembers of the association, will treat a variety of other subjects in the fire prevention and protection fields Among them will be fire and electrical safety in mobile homes and trailer camps, organizing industrial fire protection, flammable liquid storage and handling, rural fire protection, lumberyard fire problems, mutual aid plans, and the production and transportation of flammable gases For information, write the National Fire Protection Association, 60 Batterymarch St, Boston 10

Prevalence of Poliomyelitis —According to the National Office of Vital Statistics, the following number of reported cases of poliomyelitis occurred in the United States, its territories and possessions in the weeks ended as indicated

Area	Oct 1, 1960 Paralytic Type	Oct 1, 1960 Total Cases	Oct 3 1959 Total
New England States			
Maine	2	2	4
New Hampshire			
Vermont			
Massachusetts	1	1	9
Rhode Island	2	3	
Connecticut		1	2
Middle Atlantic States			
New York	8	11	29
New Jersey	3	3	8
Pennsylvania	9	13	14
East North Central States			
Ohio	4	[illegible]	12
Indiana	7	13	12
Illinois	[illegible]	6	17
Michigan	8	9	30
Wisconsin	4	6	5
West North Central States			
Minnesota	[illegible]	[illegible]	20
Iowa		2	9
Missouri	2	2	16
North Dakota		1	1
South Dakota			
Nebraska	1	1	6
Kansas	1	2	5
South Atlantic States			
Delaware			
Maryland	21	21	3
District of Columbia			
Virginia	3	3	6
West Virginia	1	2	6
North Carolina	2	2	19
South Carolina	3	7	5
Georgia	1	1	12
Florida			2
East South Central States			
Kentucky		17	20
Tennessee	1	1	34
Alabama	1	1	3
Mississippi	1	1	1
West South Central States			
Arkansas	2	2	10
Louisiana			7
Oklahoma	1	2	6
Texas	7	11	9
Mountain States			
Montana	2	2	
Idaho			
Wyoming			
Colorado	2	2	1
New Mexico	1	1	1
Arizona			1
Utah			
Nevada			1
Pacific States			
Washington			14
Oregon	1	3	10
California	8	13	17
Alaska			
Hawaii			
Territories and Possessions			
Puerto Rico	[illegible]	5	1
Total	125	183	388

Plan for Diagnostic Center for Mentally Retarded —The Training School at Vineland, N J, announced that it is seeking to acquire Ellis Island in New York Harbor from the federal government so that it may establish an international diagnostic center for mental retardation The proposed center, in addition to its main purpose of diagnosis for the retarded, would also include research and professional training facilities Pearl S Buck, president of the board of trustees, and Dr Walter Jacob, director of the training school, attended a meeting in New York City in which representatives from some 20 organizations put forth plans for acquisition of Ellis Island Federal officials had requested comprehensive plans for the proposed use of the island, which has been lying idle since 1954 as surplus government real estate The Department of Health, Education, and Welfare could make the island available without charge, as permitted by law Ellis Island, actually a group of three islands connected by causeways, is located in the upper regions of New York Bay If the government decision is in favor of the training school proposal, the center would become a new unit of the Vineland institution

Information Sought on Murder in Seattle —The Seattle Police Department is investigating a possible double murder, in which the victims are Manzanita Rockwell, a female, 36 years of age, and Dolores Mearns, alias Dolores Rockwell, 18 years of age Any physician who has x-rayed or treated either of these suspect victims during recent years and who has not been interviewed by members of the Seattle Police Department, wire the Seattle Police The suspect is Raoul Guy Rockwell, alias R Rogers, a white male, 6 ft 2½ in tall, 190 to 220 lbs, brown eyes, dark brown hair, cleft chin, and broad-shouldered He was born in 1924 in Brooklyn, as Guy Muldavin He received multiple injuries and fractures in an auto accident Aug 30, 1959, for which he had been treated with "intramedullary Rush pin fixation of the left ulna," and "a Rush pin inserted from the distal end of the left humerus through the lateral epicondyle" and "a screw across the fracture site in the middle third of the shaft of the left humerus" Further treatment included "intramedullary fixation of left clavicle with Kirschner wire," which wire was removed Additional scars include "healed surgical scar over left clavicle, healed scar over posterolateral aspect of left arm 4 in above the olecranon process," and "a curved scar, several inches long, over posterolateral aspect of left elbow" He will have to seek medical attention Any physician who has knowledge of him subsequent to August, please wire collect to the Seattle Police Department

Thoracic Group Awards Fellowships —Twenty-five young men and women have been awarded fellowships by the American Thoracic Society, medical section of the National Tuberculosis Association, for studies this year in medical centers throughout the country Announcement of the awards was made Sept 18 by Dr Julius L Wilson, Philadelphia, director of medical education, NTA The fellowships are a part of the association's program to interest "promising undergraduate and graduate students" in research and teaching in tuberculosis and other respiratory diseases Support of the fellowships is in many instances shared by tuberculosis associations affiliated with the NTA The fellowships amount to $90,000, mostly from Christmas Seal funds Two special fellowships, named in honor of Edward Livingston Trudeau, first president of the NTA, have been reawarded to Dr David W Cugell, of Northwestern University Medical School, Chicago, and Dr Roger M Des Prez, of New York Hospital-Medical Center, New York City As the result of a gift from the Potts Memorial Institute, Dr Cugell's fellowship has been renamed the Potts Memorial-Edward Livingston Trudeau Fellowship

Pacific Northwest Meeting of Physicians —The American College of Physicians will hold a Pacific Northwest regional meeting for Alaska, Idaho, Oregon, Washington, and British Columbia, Friday and Saturday, Oct 28-29, at the University of Washington School of Medicine, Seattle The scientific sessions, which will be held at the Health Sciences Auditorium of the university, will include the following papers

- Chronic Hepatitis, Dr W C MacDonald and Dr A Bogoch, Vancouver, B C
- Metabolic Studies in Primary Aldosteronism, Dr Kenneth Evelyn, Dr Hamish McIntosh, and Dr Charles W Carpenter, Vancouver, B C
- Dissecting Aneurysm of the Coronary Arteries, Dr Ryle A Radke and Dr Clayton Haberman, Everett, Wash

Speakers at the dinner 7 30 P M, Oct 28, will be Dr Chester M Jones, president-elect of the college, presenting "Certain Aspects of the College—Its Opportunities and Its Obligations," and Walter F Hiltner, Ph D, of the Boeing Airplane Company, who will present "The Exploration of Space" For information, write Dr James W Haviland, Governor of the College for Washington and Alaska, 721 Minor Ave, Seattle 4

Three Physicians Honored by Surgeons —Three doctors were awarded the Paracelsus Medal at the joint opening session of the 14th general assembly of the World Medical Association and the 63rd Deutsche Arztetag which convened in the Berlin Congress Hall, West Berlin, Germany, on Sept 16 Those honored were Dr Curt Emmerich, of Baden-Baden, Germany, "in recognition of his untiring efforts to picture for the people of the world the true character of the doctors who make up the medical profession," Dr Walter Stoeckel, of Berlin, Germany, professor of obstetrics and gynecology, professor of urology, and emeritus director of the University Women's Clinic, "in recognition of his

outstanding contributions to medical science,' and Dr Louis H Bauer, of New York City, secretary general of the World Medical Association, 'in recognition of the service he has rendered to the medical profession of the world" The Paracelsus Medal, named for the 16th century physician and chemist who promoted the use of specific remedies and was the author of many medical works, was established in 1952 as the highest award bestowed by the Deutsche Ärztetag (German Physicians' Day) It is usually awarded to three distinguished' doctors annually

Conferences for Nurses—Nurses throughout the country will have an opportunity early next year to hear about and discuss ways to improve nursing care at a series of four conferences conducted by the American Nurses Association in New York City, Portland (Ore), Denver, and St Louis They will cover all areas of nursing practice and will be geared to accommodate 1,000 nurses—members of ANA and nonmembers—in each city Advance registration will be necessary, with fees payable on admission at each site Addresses and group discussions will focus on the improvement of nursing practice through the furtherance of patient-centered care, increased recognition and acceptance of the profession's responsibility to set standards for nursing practice, and the sharing of ideas for use in local conferences and institutes Conferences will be in New York City, Feb 14-17, Portland, Ore , Feb 28-March 3, Denver, March 5-8, St Louis, March 15-18 Fee will be $15 for ANA members, $30 for nonmembers, and will entitle each attendant to copies of all major addresses and group reports made while the conference is in session For registration blanks, write to Section Regional Conferences, American Nurses Association, 10 Columbus Circle, New York 19

Clinical Scientists Meeting in Washington—The Association of Clinical Scientists will meet in Washington, D C , Nov 4-6, for its annual meeting, a scientific seminar, and the presentation of the Sunderman Award to Dr Asher Yaguda, practicing pathologist of Newark, N J He will be honored as the Clinical Scientist of the Year for his outstanding zeal in the pursuit of medical laboratory science' At the annual banquet Dr Yaguda will present the Award Oration Dr Hans N Naumann of the Kennedy Veterans Administration Medical Teaching Group Hospital, Memphis, Tenn , will be awarded an honor diploma at the same meeting for his meritorious contributions to the furtherance of clinical science The annual meeting of the association will be preceded by a two day applied seminar, Measurements of Pancreatic Function in Clinical Medicine," at the Washington Hospital Center The instructional staff, under the leadership of Dr Frederick W Sunderman, of Jefferson Medical College, Philadelphia, will consist of more than 30 research experts in the field of pancreatic diseases The present officers of the association are Dr George F Stevenson, Chicago, president, Dr Herbert Derman, Kingston, N Y , vice-president, and Dr Robert P MacFate, Chicago, secretary-treasurer

Psoriasis Research Award—The Department of Dermatology, Baylor University College of Medicine, Houston, Texas, invites applications for the Mr and Mrs J N Taub International Memorial Award for Psoriasis Research This annual award of $1000 was established in 1957 by Carol and Henry J N Taub in honor of their grandparents, Mr and Mrs J N Taub The establishment of this 10-year program carried with it the hope that the award will be instrumental in the development of a cure to alleviate one of the problems of mankind The award is designated for the individual or group who has done the 'most outstanding investigative work' in this field Results of the research must have been presented before a dermatological medical society or published in a recognized medical journal during the calendar year The name of any applicant for the award, together with supporting data, should be submitted for consideration before Dec 31 The recipient will be determined by a committee composed of seven men If, in the opinion of the committee, the calendar year has failed to yield a deserving contribution, the award will not be given Address all communications to Dr John M Knox, Department of Dermatology, Baylor University College of Medicine, Houston 25, Texas

Postgraduate Assembly in Anesthesiology—The 14th annual postgraduate assembly in anesthesiology will be held at the Hotel New Yorker, New York City, Dec 7-10 Among the speakers will be Dr Louis Sokoloff, National Institute of Mental Health, Bethesda, Md , and Dr Christian J Lambertsen, University of Pennsylvania School of Medicine Outstanding anesthesiologists on the program include Dr Paul R Dumke, Henry Ford Hospital, Detroit, Dr John B Dillon, University of California Medical Center, Los Angeles, and Dr Douglas W Eastwood, University of Virginia Medical School, Charlottesville, Va On Dec 8 clinics will be held at various hospitals throughout the metropolitan area On the same day one of the highlights of the meeting will be a closed circuit television program featuring newer advances in anesthesiology This program will also be shown in the Los Angeles, Calif area Dec 9 on a closed circuit In addition there will be luncheon conferences arranged for the audiences to dine and converse with the experts" This meeting is under the sponsorship of the New York State Society of Anesthesiologists, Inc The annual dinner-dance, Dec 8, will be the occasion for the induction of the newly elected officers by the present president, Dr Edwin Emma, Flushing, N Y For further information, write Dr Edwin J DePolo, 145 East 49th St , New York 17

National Tuberculosis Association Fellowships—The American Thoracic Society (formerly the American Trudeau Society), Medical Section of the National Tuberculosis Association, invites applications for the following research fellowships and teaching traineeships in the field of respiratory diseases and tuberculosis A few fellowships at a higher level of training and award are offered to specially qualified candidates with an M D degree who have been assured of a continued teaching or research appointment on completion of training Trudeau fellowships are awarded for one year but may be renewed up to a total period of four years Postdoctoral research fellowships are offered to candidates holding the degree of M D, Ph D, or Sc D for further training as scientific investigators Predoctoral research fellowships are offered to graduate students with a bachelor's degree to work on a research project for an advanced degree other than M D Physicians entering their second or third year of residency in internal medicine or thoracic surgery at a medical center, who may be interested in a career of medical teaching, are offered teaching traineeships Supplementation of these awards by the institution involved is not necessary Each applicant for an N T A fellowship or traineeship must have been accepted by the head of the department under whom he expects to work for the next academic year in this country Awards are determined by individual circumstances and are paid directly to the fellow on a quarterly basis They are granted for one year, beginning any date after Apr 1, and are renewable for a total of three years All applications must be submitted by Nov 1 Information may be obtained from the Director of Medical Education, American Thoracic Society, 1790 Broadway, New York 19

EXAMINATIONS AND LICENSURE

MEDICAL SPECIALTY BOARDS

AMERICAN BOARD OF ANESTHESIOLOGY *Written* Various locations, June 30 *Oral* Kansas City, Apr 17-22 Sec, Dr Forrest E Leffingwell, 217 Farmington Ave, Hartford 5, Conn

AMERICAN BOARD OF DERMATOLOGY Final date for filing applications of candidates completing training by October 15, 1960 is March 1, 1961 *Written* Several cities, June 5, 1961 *Oral* Philadelphia, Oct 13-16, 1961 Sec, Dr Maurice J Costello, One Haven Avenue, New York 32, New York

AMERICAN BOARD OF INTERNAL MEDICINE New York City, Nov 14-17 Closing date for filing application was July 1 Schedule for 1961 *Written Examination*, October 16 *Oral Examinations* New Orleans, Jan 30-Feb 2, Chicago, April 4-7, Los Angeles, Sept 26-29, New York City, Nov 7-10 Closing date for acceptance of applications for the January and April examinations was October 1, 1960, and for the September and November examinations is June 1, 1961 Sec-Treas, Dr William A Werrell, One West Main St, Madison 3, Wis

AMERICAN BOARD OF NEUROLOGICAL SURGERY *Oral* New Haven, Nov 13-16 Final date for filing application is Sept 1 Sec, Dr Donald D Matson, 300 Longwood Ave, Boston 15

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY *Written* Various cities of the United States, Canada, and military centers outside of continental United States, January 13 *Oral* Chicago, Apr 7-14 Application for certification, new and reopened in Part I, and requests for reexamination in Part II are now being accepted Deadline for receipt of applications for the written examination was August 1 Candidates submitting applications in 1960 for the 1961 examinations are not required to submit case reports as previously required to complete the Part I examination In lieu of this requirement, new candidates are required to keep in their files a duplicate list of hospital admissions as submitted with their application, for submittal at the annual meeting in Chicago should they become eligible to take the Part II (oral) examination Reopened candidates will be required to submit case reports for review thirty days after notification of eligibility Exec Sec, Dr Robert L Faulkner, 2105 Adelbert Road, Cleveland 6

AMERICAN BOARD OF OPHTHALMOLOGY *Written* Jan 23, 1961 Deadline for filing applications was July 1 Sec, Dr Merrill J King, Box 236 Cape Cottage Branch, Portland, Maine

AMERICAN BOARD OF ORTHOPAEDIC SURGERY *Written and Oral, Part I* Palo Alto, Calif, Nashville, Tenn, Philadelphia, June 19-20 Final date for filing application is Jan 1 *Written and Oral, Part II* Miami Beach, Jan 4-6 Final date for filing application was July 1 Sec, Dr Sam W Banks, 29 E Madison St, Chicago 2

AMERICAN BOARD OF PEDIATRICS *Written* New York City, January Final date for filing application is Dec 1 Sec, Dr John McK Mitchell, 6 Cushman Road, Rosemont, Pa

AMERICAN BOARD OF PHYSICAL MEDICINE *Parts I and II* New York City, June 24-25 Final date for filing application is Feb 15 Sec, Dr Earl C Elkins, 102 Second Ave, S W, Rochester, Minn

AMERICAN BOARD OF PLASTIC SURGERY *Entire examination—written, and oral and practical* given in May of each year Final date for submitting case reports is January 1 Next examination to be given in New York City, May 14-16 Corres Sec, Mrs Estelle E Hillerich, 4647 Pershing Ave, St Louis 8, Mo

AMERICAN BOARD OF PSYCHIATRY AND NEUROLOGY New York, New York, Dec 12-13, New Orleans, Mar 20 21, and Chicago, Oct 9-10, 1961 Sec, David A Boyd, Jr, 102-110 Second Ave, S W, Rochester, Minn

AMERICAN BOARD OF RADIOLOGY *Examination* Cincinnati Dec 10-13 Deadline for filing applications for the June examination was Jan 1 Filing deadline for the December examination was July 1 A special examination in Nuclear Medicine (for those diplomates in Radiology or Therapeutic Radiology) will be offered provided there are sufficient applications Sec, Dr H Dabney Kerr, Kahler Hotel Bldg, Rochester, Minn

AMERICAN BOARD OF SURGERY *Written* (Part 1), Various Centers, Dec 7 *Candidates are urged to apply several months before completion of training requirements* The closing date for filing applications was August 1 Those completing training requirements after September 30 cannot be considered for the December Part I examination of the same year *Oral* (Part II)—Indianapolis, Oct 24-25, Buffalo, Nov 14-16, Nashville, Dec 12-13, Philadelphia, Jan 16 17, Houston, Feb 13-14, Columbus, Ohio, Mar 13-14, New York City, April 19-20, Portland, Ore, May 15-16, San Francisco, May 18-19 Sec-Treas, Dr John B Flick, 1617 Pennsylvania Blvd, Philadelphia 3

BOARD OF THORACIC SURGERY *Written* Various centers throughout the country, Feb 10 Final date for filing application is Dec 1 *Oral* April 1961 Final date for filing application is Dec 1

AMERICAN BOARD OF UROLOGY *Written* December *Oral-Clinical* Chicago, February 1961 Exec Sec, Mrs Ruby L Griggs, 30 Westwood Road, Minneapolis 26

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reactions to new situations, all of which will be multifold We may learn to harness the tremendous energies of space and thus to make our life more useful and productive We may gain knowledge of sterile worlds and possibly new forms of life which may help to understand our own In establishing a small 6-by-6-ft closed ecological system we learn about our earth's 8,000-mile diameter ecological system In reconstituting an atmosphere we learn more about our own atmosphere and its interaction with man

When the astronaut makes his first venture into space the achievement will represent the culmination of a tremendous technologic effort, a significant segment of which represents preventive medicine and its associate, aerospace medicine The achievement from the standpoint of preventive medicine and aerospace medicine will represent the peak of a very large pyramid of accumulated bits and pieces of knowledge assembled one upon the other over a period of many years, by many people If one could take the time to analyze the building blocks of this pyramid one could see that the astronaut will be ensheathed in all of the protection which many sciences and arts can furnish

The technology of rocketry has been the major development which has opened the new frontier A space vehicle, rocket-powered, can attain very high velocities at relatively low acceleration rates—acceleration rates which are within human tolerance levels Several now have lifted payloads into orbit, and a few have pushed their payloads into escape hyperbolas

The dynamics of some of the orbits which can be established through space flight will later allow a vehicle to coast on and on without further expenditure of energy until it is affected by some force, such as atmospheric resistance, meteoritic material, or its own thrust, applied to change its course, speed it up, or slow it down As a theoretical consequence, it is possible for a space vehicle to coast around in the solar system much the same as a very small planet It can be seen readily that distances which can be covered without further energy expenditure may be tremendous With thrust properly applied, orbits can be expanded or contracted Furthermore, the gravitational influences of other planets or celestial bodies can be used for changes in course or for drawing the vehicles toward or into them

All of this, of course, offers fantastic possibilities for the long range future, but while such possibilities exist one can be assured that effort—possibly great effort—will be made to utilize these new potentials

Project Mercury is the first series of steps that the United States is taking in this direction According to the Director of the National Aeronautics and Space Administration,[1] Project Mercury will place a manned capsule on top of an intercontinental ballistic missile rocket It will be boosted into an orbit at an established altitude of 100 to 150 miles and as nearly circular as possible After a few revolutions, retrothrust rockets, incorporated into the capsule system, will initiate the descent of the capsule into the atmosphere and will allow it to arrive at its landing point in less than one-half orbital revolution Parachutes incorporated into the capsule system will function after the capsule has been slowed down by aerodynamic drag It will be possible to recover the capsule from either land or sea

Preventive Medical Aspects

Thus the manned Mercury capsule then will place an astronaut on top of a huge supply of highly flammable fuel and oxidizer material

The fuel and the oxidizer which will propel the vehicle into orbit will have arrived in the tanks via many procedures which have been devised by preventive medicine and safety engineering experts to safeguard the handlers, from the refinery or the chemical industry to the tanks of the vehicle One has only to watch a fueling operation performed by men properly trained, properly clothed, and properly protected, to appreciate fully the preventive medicine which has been built into the system[2,1]

Let us pause, now, to have a look at some of the fuels and oxidizers about which we are concerned and assess some of the hazards involved The booster which will lift the astronaut into orbit will probably be propelled by one of the simpler kerosene-like hydrocarbon fuels The oxidizer will probably be liquid oxygen (LOX) In use, however, or in prospective use for future boosters, are such chemicals as hydrazine, furfuryl alcohol, liquid hydrogen, and aniline Oxidizers in use or in prospect are liquid oxygen, red and white fuming nitric acid, hydrogen peroxide, and possibly fluorine derivatives and nitrogen tetroxide

It is not difficult to see orthodox preventive medicine associated with the fuel and oxidizer handling of this type Nor is it difficult to see the preventive medicine required between the industrial manufacture of the products and the fuel tanks of the vehicle

The preventive medicine aspects of protection of the astronaut who rides atop a number of thousands of gallons of the fuel and oxidizer is not so orthodox First of all, the life support system must keep the astronaut comfortable during the count-down, which can cover periods from minutes to a few hours Should fire or explosion become imminent while on the launch-pad, the astronaut or the controller inside the blockhouse must be able to trigger the escape device to propel the capsule out of the area This is performed by, first, freeing the capsule from the booster system and then, through the use

of downward firing rockets, lifting it high and away, and then dropping it into a safe area by means of parachutes

Now to turn to noise At the time of the take-off noise levels inside the capsule may reach ranges of 130 to 135 db sound pressure level with the major components of the noise in the very low frequency range, that is, in the area of 20 cycles per second [4] The body vibratory aspects of the range of 0 5 to 20 cps may be disturbing to the seated pilot Experiments to date, however, denote that it will be within the tolerance range

After launch and after passage through the atmosphere, burnout of the rocket fuel will initiate the coasting phase If the vehicle is free of atmospheric drag then, in accordance with Newton's law, a state of zero-g will result During this situation the astronaut and everything on board the craft will be in the weightless state and will remain so as long as there is no rotation, tumbling, power application, or atmospheric drag With the zero-g state, or weightlessness, a complete new generation of problems will occur [5] Since it is impossible at present to simulate such a situation for periods of much longer than 60 seconds, our knowledge of the effects of weightlessness on man and materials remains scanty

In view of the many hundreds of short zero-g flights performed in aircraft along parabolic trajectories, it is the opinion of most investigators that nothing serious will happen to the occupant as long as he is properly restrained and has the proper instruments for consultation, and as long as the period is not extended too long However, there are many "ifs which will require experience before the final answers can be given

Weightlessness will affect not only the astronaut but also his environment Fluid cavitates under these conditions and forms globular masses, free-falling away from the walls of a container Gas or air does not move unless it is mechanically moved Any function requiring gravity as a vector will be altered

It would require an extensive book to go into all the support and protective gear which will encompass the life-support system of the astronaut his protection against the high-g forces of launch and reentry, his capsule pressurization system, his protection against tumbling or other aberrant rotational forces, his protection against heat, fire, and anoxia, his provision for survival in the sea, jungles, or sparsely settled areas of the earth Nothing has been said about the selection of this group of premium men,[6] as it is a story in itself Four decades of the knowledge of aviation and space medicine, and various allied sciences and industry have been built into this system

In conclusion, let us say first that this is only a beginning of a series of adventures, and only the beginning of our problems, as the solution of each generation of problems begets a new generation of problems As one noxious substance is removed from a cabin atmosphere, the removing element creates other noxious substances As protection is devised against one force, protection against the problems arising from the solution requires new protection, and so on *ad infinitum* [7 8] But those who have seen barrier after barrier in the aerospace sciences melt away as new knowledge is brought to bear, remain hard-shell optimists

Engineering technology is advancing so rapidly that challenge after challenge is being extended to industrial and environmental medicine As never before, teamwork is required among engineers, physicists, physicians, and associated scientists in the exploration of our newest frontier—that of space It is no pun to state that the horizons of preventive medicine must be extended into space because no field of medicine can make a greater contribution nor has so large an obligation

We are rapidly using up our accumulated medical knowledge which has an application in space technology Sooner, rather than later, we must obtain new knowledge in order to use the energies of space in perfecting our closed ecological systems Scientific discoveries are needed, as well as advancements in technology, if we are to do more than skirt the fringe of space and be content with limited probes and limited observations

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NOTE The contents of this manuscript reflect the personal views of the authors and are not to be construed as an official statement of Air Force policy

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The Role of Effort and Occupation (Including Physicians) in Coronary Occlusion

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A questionnaire method was developed for the study of 2,600 cases of proved acute coronary occlusion The data included the hour, the day, and the type of effort or the mode of rest at the onset of the episode The results did not show that occupation, exertion, or state of inactivity played any part in precipitating the occlusion There was no evidence that one attack of acute coronary occlusion predisposed to a second attack except indirectly because of the underlying atherosclerosis The author does not believe that coronary occlusion has become epidemic or that it is caused by modern stress and strain, he believes that its apparent incidence has increased because of the increased age of the population, improved diagnostic skill of physicians, and changes in the classification of heart diseases

CORONARY occlusion is one of the leading causes of death in the United States and Canada and probably the most common of catastrophic illnesses Because of the suddenness with which it strikes, the severity of the pain, and the accompanying fear of death, it is perhaps the medical emergency most feared among the informed population In spite of the enormous amount of research being carried on in the basic aspects of the disease process, statistics are inadequate and confused, and, as a result, misconceptions still prevail In this contribution, I hope to clarify some of the controversial points on the basis of a long and particular interest in coronary occlusion and the observation of an unusually large number of patients

I became interested in the subject of coronary occlusion more than 35 years ago, and to date my co-workers and I have observed and carefully documented some 2,600 cases in which the clinical diagnosis was confirmed electrocardiographically and by laboratory determinations

In any discussion of coronary attacks, a number of questions arise Those that are commonly encountered are as follows 1 Just what constitutes a "heart attack"? 2 Coronary thrombosis has been called the "doctor's disease" Is it? Are professional people in general more susceptible to it? 3 Is occupation a factor in it? 4 Can unusual or severe effort, such as shovelling snow, cause or precipitate coronary occlusion? Can effort raise the blood pressure, produce intimal hemorrhage within the coronary artery, and thus lead to thrombosis? 5 Will arduous but routine labor over many years lead to coronary disease or thrombosis? Conversely, as English investigators currently emphasize, is it true that physically more active persons are less likely to develop coronary occlusion? 6 Are patients with hypertension more apt to develop coronary occlusion? If so, is it due to the production of intimal hemorrhage? 7 Is coronary occlusion on the increase? Is there an "epidemic" of this disease? 8 Is coronary occlusion the result of the stress and strain of modern times? Were ancient peoples subject to it? 9 Why is the incidence of coronary disease particularly high in New York City and New York State? 10 How does one explain the apparently increased incidence of coronary disease in younger people, and especially in young soldiers? 11 Is shock a precipitating factor in coronary occlusion? 12 Does sleep hasten the formation of coronary thrombosis? 13 Is there danger that an arteriosclerotic plaque in a coronary artery will break off on severe exertion, producing embolism and thus occlusion? 14 Can coronary thrombosis be prevented? Will long-term anticoagulation ther-

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apy accomplish this? If the patient is seen in the "impending phase," will immediate anticoagulant treatment prevent occlusion? 15 Does one coronary occlusion predispose to another? 16 Is the disability that follows coronary occlusion permanent or temporary? 17 Should a person who has sustained coronary occlusion ever return to heavy manual labor?

These questions are important to modern medicine, to industry, and to law They involve the very pathogenesis of coronary occlusion, and they have been asked repeatedly over the past 35 years in litigation, and in compensation courts Between 60 and 65 million workers are probably in the "coronary age group" Over the entire United States, millions of dollars are paid out annually in compensation claims to persons who have developed heart disease, allegedly caused, or aggravated by, exertion or by occupation

Questionnaires

In an attempt to throw light on the mechanisms involved in acute coronary artery occlusion, my colleagues and I have documented approximately 2,600 cases by means of a special questionnaire, filled out from the histories obtained from our patients Even if the acute coronary occlusion was suffered one month, 1 year, or 10 years previously, it is surprising how well many details are recalled by the patient and his family Not all points, of course, were covered in every instance, but a significant total was attained in each category Good information was obtained about the state of activity or rest at the moment of onset of maximum pain, during the entire day, and during the preceding four to six weeks Particular attention was centered on the hour or two just prior to the clinical attack

Before discussing the results of the questionnaire, it is well to define the terms we are using Although there is a pathological difference between acute coronary occlusion and acute coronary thrombosis, for the purposes of this contribution we are using these two expressions interchangeably

"Coronary Attacks"

Heart attack" is an unscientific term which, unfortunately, is in common use by the public It has come to connote a sudden attack stemming from disease of the coronary arteries Basically, there are two types of severe acute coronary episodes acute coronary insufficiency without occlusion, which we shall not discuss at this time, except in differentiation, and acute coronary occlusion with through-and-through myocardial infarction, which is the subject of this report

Differential Diagnosis—One can distinguish between these two types of acute coronary episodes clinically, electrocardiographically, and pathologically, in at least 95% of cases [1, 2] We believe this distinction has not been clearly made in many discussions of coronary episodes, and that this accounts for some prevailing misconceptions Effort, for instance, plays an unquestioned role in acute coronary insufficiency without occlusion and may even lead to death, however, as we shall show, our statistics would indicate that it is not a factor in coronary occlusion Failure to distinguish between the two disease processes has led to faulty conclusions about the pathogenesis

Attacks of acute coronary insufficiency without occlusion vary widely in degree Although the severe form may even cause death, it is a relatively benign process as an over-all category, in contrast to coronary occlusion The pain of acute coronary insufficiency without occlusion, unlike the simple, transient episode of angina pectoris, is usually severe and prolonged The inadequacy of the coronary circulation far exceeds functional limits and frequently results in pathologically demonstrable changes These consist of infarction or of focal areas of necrosis, confined to the subendocardial region and the papillary muscles This fact contributes to differential diagnosis from coronary occlusion, in which through-and-through infarction results Since the subpericardial layer is not involved in acute coronary insufficiency without occlusion, the pericardial rub heard in coronary occlusion is absent Other clinical and laboratory findings such as shock, fall in blood pressure, leukocytosis, fever, increased erythrocyte sedimentation rate, and more recently, serum glutamic oxaloacetic acid levels, features of coronary occlusion, are either absent or occur in minor degree

In coronary occlusion the usually severe pain in the chest or arms is apt to be accompanied by a fall in blood pressure, shock, nausea and vomiting, leukocytosis, fever, pericardial rub, elevated sedimentation rate, and high serum transaminase levels Transmural infarction with endocardial and pericardial involvement is demonstrable on pathological examination, unless the patient dies within 24 to 36 hours of the onset

There is a clear electrocardiographic distinction between the two conditions In acute coronary insufficiency without occlusion, because of practically exclusive subendocardial involvement, depression of the RS-T complex, T-wave inversions, or both are seen but no deep Q-waves There are no dramatic RS-T elevations In acute coronary occlusion, with its through-and-through infarct of the myocardium as the result of complete deprivation of the blood supply to this area, one finds deep Q-waves and RS-T elevations progressing into inverted T-waves The RS-T elevations are associated with pericardial injury Such an electrocardiogram spells true acute coronary artery occlusion

I reiterate that in this paper I shall discuss only the factors concerned with the onset of acute coronary occlusion I am excluding acute coronary insufficiency without occlusion, in which the mech-

anism differs This latter condition is immediately suspected if factors are present which increase the work of the heart, decrease the coronary flow, or diminish the oxygen-carrying capacity of the blood Effort, emotional stress, sexual intercourse, straining at stool, paroxysmal tachycardia, shock, and

TABLE 1 —Occupation of Patients with Coronary Occlusion (1,377 Cases) vs General Population

Occupation	Cases No	Cases %	U S Census, N Y Area, %
Workers and laborers	549	40 0	50
Store, office, and business	630	46 0	39
Professional	198	14 0	11

hemorrhage precipitate this type of coronary heart attack, but they do not cause acute coronary occlusion

Results of Questionnaire

Every patient seen by me and my colleagues in private practice or in the hospital service for more than 25 years were queried in detail and the results recorded These patients came primarily from New York City and its environs, including the states of New York, New Jersey, and Connecticut About 5% came from the remaining areas of the United States and from foreign lands Included were laborers, white collar workers, businessmen, executives, and professional men In other words, the occupations ran the gamut from the physically very active to the most sedentary, and the interviewees ranged from those in the lowest income group to the most highly paid

Occupation vs Coronary Occlusion —In brief, we have found that occupation does not play a role in coronary occlusion Since 1937, my colleagues and I[3-6] have reported that the laborers among our patients developed less coronary occlusion than is commensurate with their proportion in the population At that time, we were satisfied to disprove the almost universally held belief that occupation was a factor in the precipitation of coronary occlusion, and that the laborer was more apt to be stricken than the person with a sedentary occupation

Table 1 gives the occupational breakdown in the general population according to the U S census classification, and also that of our 1,377 cases of coronary occlusion *Workers* and *laborers* in our group included unskilled laborers, garment workers, carpenters, waiters, traffic managers, electricians, pressers, butchers, truck drivers, tailors, bakers, and persons in every other kind of job category imaginable *Store, office,* and *business* workers included jewelers, grocers, restaurant keepers, clerks, salesmen, manufacturers, merchants, executives, managers, bankers, and so on Finally, *professional* personnel included physicians, teachers, lawyers, members of Congress, professional soldiers, and the like

This Table relates the number of cases of coronary occlusion occurring in each group to its percentage of the population at large, as published by the U S Census for 1950, the most recent date available Among our own patients, only 40% were workers and laborers, although this group made up 50% of the general working population It would be easy to jump on the bandwagon and conclude that the thing to do is to work hard physically and prevent a coronary occlusion, but we are not prepared to go that far Again, among our patients, store, office, and business people (white-collar class) developed coronary occlusion more frequently than might be expected according to their ratio in the general working population—46 versus 39% Finally, the professional men among our patients developed coronary occlusion more often than would coincide with their ratio in the working population—14 against 11% While we are not convinced that the professional man is more prone to coronary occlusion than his brethren in other categories, these figures would make it appear that the idea prevalent from 1920 to 1935, namely, that the sedentary worker was relatively immune from coronary disease, was erroneous

English Statistics —Morris and co-workers,[7] in England, have gone far beyond our conclusions They found the death rate from *heart disease in general* to be lower among those doing heavy labor than in those engaged in light work For example, coal heavers and laborers had relatively few deaths from this cause—about 300 per million annually, whereas the rate was almost 900 among hairdressers and typists Thus, the greater the physical exertion, the fewer deaths in that category For *coronary disease specifically*, the annual death rate per million was only 254 in the heavy-labor classes, this figure more than doubled to 556 in the physically light occupations

TABLE 2 —Hour of Onset in 603 Attacks of Coronary Occlusion

Hour	No of Attacks A M	No of Attacks P M
1	29	28
2	42	30
3	21	24
4	15	20
5	21	22
6	20	22
7	30	18
8	23	21
9	26	21
10	29	35
11	29	33
12	23	21
Total	308	295

The figures of Morris and co-workers on the clinical incidence of angina pectoris and coronary heart disease have been widely quoted As in the matter of deaths, the more physically strenuous the job, the lower the clinical incidence of coronary disease Thus, in the English double-decker bus, the drivers

fared much worse than the conductors, who constantly climb up and down

Our own belief is that Morris over-emphasized the immunity of persons doing heavy physical work to coronary disease Persons who are not well normally do not engage in physically arduous occupations That is why, although Morris and others confirm our early statistics, we are still reluctant to go in our deductions as far as do they

TABLE 3 —Period of Day of Onset in 1 248 Attacks of Coronary Occlusion

Period of Day	No of Attacks	%
7 a m 1 p m	352	
1 p m 7 p m	296	
Hours not specified	12	
7 a m 7 p m	660	52 9
7 p m 1 a m	274	
1 a m 7 a m	307	
Hours not specified	7	
7 p m.-7 a m	588	47 1

Time of Onset —Table 2 gives further evidence that effort and occupation are not factors in coronary artery occlusion In 603 episodes the patient was able to pinpoint the *hour* at which excruciating pain, collapse, or shock developed It should be noted that the maximal figure is 42, at 2 a m Next in order were 10 p m with 35, and 11 p m with 33 These are ordinarily not working hours

There is another indirect proof that physical effort is of no moment Table 3 records the *period of the day,* or time of night to early morning, versus morning through early evening, during which 1,248 attacks of acute coronary occlusion occurred It will be seen that 660, or 52 9%, of the 1,248 attacks occurred from 7 a m to 7 p m, that is, roughly during the 12 daylight hours From 7 p m through the night to 7 a m, the figure was 47 1% If effort were a factor, one would expect the percentage of attacks occurring during the working hours to be much higher than 52 9%

Onset by Day of Week —Table 4 records the *day of the week* on which the acute coronary occlusion occurred, this was recorded in only 398 instances

TABLE 4 —Day of Week of Onset of Coronary Occlusion

	Attack	
	No	%
Monday	68	17 1
Tue day	64	16 0
Wednesday	48	12.0
Thursday	59	15 1
Friday	44	11 0
Saturday	52	13 0
Sunday	63	15 8
Total	398	100 0

for, as time goes by, the exact day seems to be forgotten Let us start with Monday, on which 17 1% of the attacks developed One might argue that, ordinarily, Monday is the first working day and that, therefore, this maximum figure of the week is significant But Sunday, usually the day of rest, had the third-highest incidence with 15 8%, following Tuesday with 16 0% Friday, a working day, revealed the lowest incidence, 11 0%, whereas Saturday, often a day of rest, disclosed 13 0% One can only deduce that coronary occlusion occurs no more frequently on working days than on holidays

Effort vs Coronary Occlusion —We were able to tabulate *effort*—the *type of activity,* or *inactivity,* of the patient at the time of his coronary occlusion —in 1,639 instances (Table 5) *"Rest"* includes lying down or sitting *Sleeping* speaks for itself *Walking* includes walking on the street, up stairs or downstairs, after meals, against a cold wind, and while carrying a bundle *Mild activity* includes ordinary home activities, such as housework, dressing, standing, walking about, playing with the children, talking, preparing to retire, being in the office, the store, the car, the doctor s office, and driving a car Under *moderate activity* (walking being excluded) is listed the work regularly performed by painters, carpenters, inspectors, engineers, bakers, and pressers Examples of *unusual or severe exertion* are lifting or moving a heavy load, playing football, swimming, dancing, and skating

TABLE 5 —Activity at Onset of Coronary Occlusion (1,639 Attacks)

	Cases	
	No	%
Sleep	376	22.9
Rest	445	27 2
Mild activity	421	25 6
Moderate activity	149	9 0
Walking	217	13 2
Unusual or severe exertion	31	1 9
Total	1 639	100 0

Let us look at the results Of the attacks of acute coronary occlusion, 23% occurred during sleep and 27% during rest This is hardly significant, since human adults spend one-half of each day in sleep and rest Twenty-six per cent of the attacks occurred during mild activity, 9% during moderate activity, 13% during walking, and less than 2% during unusual or severe exertion To us this adds up to the conclusion that coronary occlusion takes place irrespective of the physical activity being performed or the type of rest taken

Years ago my colleagues and I were practically alone in stating categorically that physical effort does not produce acute coronary occlusion Even as recently as 5, 10, or 15 years prior to the time of writing, the physician who generally agreed with this thesis would, nevertheless, believe that there were exceptions He would recount the story of a person who had moved a heavy piece of furniture, lifted a stuck window, or pushed his car That patient had developed pain then and there To such a physician, the exception would constitute evidence that occasionally, at least, physical effort

could cause occlusion of a coronary artery Careful analysis will show that all of us physicians, sedentary though we may be, engage in unusual physical strain 1 or 2% of the day Therefore, an impending coronary occlusion has a statistically equal likelihood of taking place during that time To assume a causal relationship is to indulge in the fallacy of *post hoc, ergo propter hoc* reasoning

The question of *shovelling snow* requires discussion A person with angina pectoris or otherwise significant coronary artery disease should not shovel snow, it involves performance of hard physical work and contention with the cold weather Both factors place a strain on the circulation, the extra demand of the myocardium for oxygen cannot be met because of the narrowed coronary arteries, and an episode of acute coronary insufficiency without occlusion may result Shovelling snow, therefore, may be dangerous or even fatal to a sick person, but he does not develop acute coronary occlusion because of that exertion Of course, for the healthy person this may be an excellent form of exercise

Is Coronary Occlusion a Doctor's Disease?—The insurance companies[8] and many physicians[9,10] have indicated that doctors suffer more coronary disease than is commensurate with their proportion in the population My colleagues and I[10] and others doubt this The physician is apt to make a more prompt diagnosis of coronary disease in himself than in his patients It is also possible that, because of excessive physical exertion and the crowded, tense lives led by many physicians, episodes of acute coronary insufficiency without occlusion may be precipitated in those who have coronary artery disease to a greater extent than would be found in a group of persons who lead more tranquil lives However, we do not believe that coronary thrombosis is a doctor's disease

Capillary Hemorrhage—Pathologists have found that *capillary hemorrhages* are associated with coronary thrombosis in the majority of cases Some physicians have, therefore, established the thesis that, if one undertakes strenuous effort—for instance, lifting a heavy suitcase and running for a train, the blood pressure is elevated and a capillary in a subintimal plaque in a diseased coronary artery ruptures, the blood pouring or oozing out into the lumen and a thrombus forming on it[11] On this basis, it has been postulated that the patient with hypertension is more likely to sustain capillary intimal hemorrhage and therefore coronary occlusion

In an attempt to clarify this point, our group at The Mount Sinai Hospital in New York studied 100 consecutive cases of coronary occlusion that came to autopsy[12,5] Horn and Finkelstein[12] of New York performed the pathology examinations, dissecting the coronary arteries assiduously and spending hours on each heart *Capillary* hemorrhages were associated with the thrombosis in the majority of those patients who had had sustained hypertension, but the incidence was even greater in the normotensive patients Surely, this is indirect evidence that effort does not produce intimal capillary rupture resulting in coronary occlusion As for hypertension itself, it is a factor in the etiology of coronary occlusion in women, in men, the relationship is not too clear[13] In any case, intimal capillary hemorrhages are not produced by sudden elevations of arterial blood pressure

Further evidence with regard to the possible relationship of effort to rupture of an intimal capillary was obtained from another direction We studied 25 consecutive patients on the wards of The Mount Sinai Hospital, who died of coronary thrombosis after they had been bedridden for weeks and months with tuberculosis, pulmonary abscess, cancer, prostatitis, and other noncardiac diseases In these 25 patients, who had been at rest for a long time, the same incidence of intimal hemorrhage associated with the thrombosis (61%) was found as in the group of 100 patients already mentioned (58%) This again induces us to think that this explanation of the mechanism of coronary thrombosis does not hold Finally, if further evidence is needed, we point to the fact that Winternitz injected fluid post mortem in the coronary arteries at a pressure of 500 mm Hg and could not produce capillary hemorrhage

Is Coronary Occlusion on the Increase? Is There an Epidemic of this Disease?

Coronary occlusion is on the increase, but there is no "epidemic" Statistics show a steadily rising incidence, and many possible reasons for this have been propounded, chief among them the influence of the mounting stress and strain of modern life My colleagues and I do not believe this to be the case[10] Stress and strain have been part of the life of mankind from prehistoric days down through the centuries, although the form may have varied

Suffice it to say that we believe that there is both a real, and an apparent, increase in the disease[10,14] The *real* increase is a benign development We live longer, so that more people reach the age when coronary disease is apt to develop The *apparent* increase is due to a greater index of *suspicion*, increased diagnostic skill, and more definitive nomenclature in recording We look for the disease, we recognize it, and we now record it in office and hospital charts and on death certificates

Better Diagnosis, Higher Reported Incidence—Coronary disease is not a new entity Examination of the arteries of Egyptian mummies proves that atherosclerosis was a part of their civilization, as it is of ours today, even though heart disease was not recognized as such by the physicians of that day of primitive medicine

Three great pathologists of the 19th century, Rokitansky, Aschoff, and Virchow, each of whom performed more than 10,000 autopsies, are said never to have seen a single coronary thrombosis The explanation lies in the fact that these pathologists did not know the disease and therefore did not look for it or report it

Modern cardiology, especially through the use of the electrocardiogram, is pinpointing diagnosis as never before, and this results in an apparent increase in the incidence of many specific cardiac disorders and defects The increase in diagnoses of coronary disease merely emphasizes the progress in this branch of medicine

Definitive diagnosis also reflects the amount and the quality of available medical care Several years ago governmental figures indicated that New York City and New York State had the highest incidence of coronary disease in the United States (This has since been exceeded by California) The conclusion, as drawn from the press and from journals, has been that the stress and strain of modern life are responsible, and that in this locality the tense pace of life is paramount We do not go along with that theory [10 14] We believe, rather, that diagnosis is more accurate in this city and state There are more physicians per 1,000 of population in New York City, and more medical schools, than in any other part of the state or any other state in the union Furthermore, it will be found that those cities and states in the United States which show a high incidence of coronary disease are also those with many medical colleges and with a relatively high percentage of physicians in the population

Changes in Recording —Coronary disease was not listed as a separate entity on death certificates until the year 1932 This practice resulted in an immediate jump in the apparent incidence In 1949 there was another sudden rise, after a further change in certification

Miscellaneous Questions

Can a Dislodged Atherosclerotic Plaque Occlude a Coronary Artery?—My colleagues and I have never, in our broad experience, seen a bona fide instance of this, although we followed one autopsy examination after another for years This situation, if it exists, is so rare that it may be disregarded

Can Coronary Occlusion be Prevented?—We believe that, in the present state of our knowledge, it is not possible to do so Other forms of heart attacks can be forestalled, e g, many episodes of acute coronary insufficiency without occlusion but not coronary occlusion per se The latter is a consequence of atherosclerosis, which must be conquered if acute coronary occlusion is to be prevented This does not signify that we are pessimistic about coronary occlusion, perhaps, the answer to atherosclerosis will be at hand tomorrow Perhaps, anticoagulant therapy will decrease the incidence of occlusion, although we physicians have all seen patients who developed it even on adequate long-term anticoagulant regimens Whether such treatment will prevent an occlusion in the impending phase of infarction one cannot yet answer categorically Our own group is working on this problem

Does One Attack of Acute Coronary Occlusion Predispose to Another?—Yes, but not directly Of course, having had one coronary occlusion, a person is more apt to develop a second because of the severe and unresolved underlying atherosclerosis

Can a Patient Who Has Had a Coronary Occlusion Ever Return to Heavy Labor?—In general, a return to, for instance, the occupation of longshoreman or truckman should only rarely be advised A patient who has recovered from an acute coronary occlusion presumably has severe coronary disease and, therefore, should avoid physical, mental, and emotional extremes These can readily precipitate acute coronary insufficiency without occlusion This is not to say that the patient who has recovered from an acute occlusion should not return to employment He should, indeed, work but within the limits of his cardiac reserve All of us have, on rare occasion, seen such patients go back to heavy manual labor or stressful occupations and do well However, these are the exceptions that prove the rule

Disability after a coronary occlusion is usually not permanent, but the physician must treat each patient individually In the 1920s, and even until about 1933, we virtually took our lives in our hands when we advised a patient to return to work The patient himself was apprehensive, and his family was even more fearful Our colleagues thought our approach was extreme Also, in those days the insurance companies paid extraordinarily good disability allowances All these factors explained the reluctance of the patient to resume his job, and the physician who urged him to do so was apt to be subjected to severe criticism These circumstances have changed

Does Sleep Hasten Coronary Thrombosis?—Of course, we do not believe that it does The question is entertained merely to present the point that it appears just as logical to us to argue that sleep precipitates coronary occlusion as to say that effort does so After all, a large percentage of attacks occurs during sleep, but since we spend from one-fifth to one-third of our lives asleep, this is not surprising

How Does One Explain the Apparent Increase of Coronary Disease in Younger People, and Especially in Young Soldiers?—With regard to the discovery of coronary disease on autopsy examination of young soldiers killed in battle in Korea,[15] the answer is not yet complete However, there is no proof that

this is a new development It may be that coronary disease is actually common in young people, in a pathological sense, but that it is diagnosed only when it becomes clinically evident because it interferes significantly with the coronary circulation

What Causes Coronary Occlusion?—Studies and observations over the years have convinced my colleagues and me that the only known cause of coronary occlusion is the presence of atherosclerosis The etiology of this condition is the subject of a tremendous volume of research

The only contributory cause of coronary thrombosis that can be substantiated, in our experience, is physiological shock[18] The accompanying slowing of the circulation probably allows the formation of the thrombus These instances are rare, however, probably accounting for no more than 1 such episode in 1,000 Hence, to all intents and purposes, we must still report that the contributory factors in the onset of acute coronary occlusion are unknown

Summary and Conclusions

The sole subject of this contribution is acute coronary occlusion Acute coronary insufficiency without occlusion, which can be distinguished from acute coronary occlusion, was definitely excluded

Investigation in patients with coronary occlusion of their types of occupation, the hour, and day of onset of attacks, and types of activity and inactivity reveals that neither occupation, effort, nor rest play a role in this form of heart attack Effort does not produce capillary hemorrhage in an intimal plaque of a diseased coronary artery It is doubted that coronary thrombosis is a "doctor's disease" In persons with significantly diseased coronary arteries shovelling snow is dangerous, because coronary insufficiency without occlusion may result

Coronary disease is on the increase because of the aging of the population, improved diagnosis, a healthy index of suspicion, and changes in classification and recording of heart diseases However, it has not reached epidemic proportions, nor is it caused by the "stress and strain" of modern life

A dislodged intimal plaque in a coronary artery practically never occurs One bout of acute coronary occlusion predisposes to another, but only because of the underlying atherosclerosis A patient recovered from an attack of coronary occlusion should return to work but, generally, not to an arduous or extremely tension-inducing job Sleep does not hasten the formation of coronary occlusion On rare occasions, however, shock may cause it

The "increase in coronary disease" observed at autopsy examination of young soldiers killed in battle signifies that this may not be an uncommon condition in young adults but one which has not yet progressed to the symptomatic stage

Coronary occlusion occurs with equal frequency in all classes of society and in persons engaged in all types of occupations, perhaps slightly less in those doing work of a physically arduous nature

At present, physicians know neither the cause of acute coronary occlusion nor how to prevent it It is the end result of an atherosclerotic process and occurs independently of external influences The logician will maintain that the evidence I have presented in each category is indirect However, adding up the data I have presented, it appears to me that my conclusions are inevitable

125 E 72nd St (21)

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Roentgenologic Surveys for Gastric Neoplasms

Report of 31,895 Examinations

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Two methods for the roentgenologic detection of asymptomatic gastric cancer, as found on 31,895 examinations, have been employed and compared With the fluoroscopic method, 12 tumors were detected in 5,020 studies Of these, three proved to be malignant All patients are living and well after five years With the photofluorographic method, 26,875 examinations were made and 48 major abnormal findings noted, 4 were diagnosed as cancer Both methods revealed the expected number of tumor suspects The authors, however, have developed a distinct preference for the fluoroscopic method and deem its further use advisable Radiation exposure for patients and examiners need not constitute a hazard in either method

TEN YEARS AGO a preliminary report was made of a fluoroscopic survey to detect gastric neoplasms [1] This was based on 1,576 examinations on asymptomatic patients The survey was continued until a total of 5,020 studies had been done Shortly afterwards, a photofluorographic program with similar objectives was begun, which terminated when 26,875 examinations had been made A report from the cancer detection clinic based on 19,194 of these photofluorographic studies was presented in 1956 [2] The present purpose is to give the final results of both programs

Fluoroscopic Survey

Details of the conduct of the fluoroscopic survey were made known in the previous report, and this information is summarized in Table 1

Table 2 gives the results of the fluoroscopic survey The patient with myosarcoma of the lower portion of the esophagus (Fig 1) is living and well The myosarcoma of the stomach (Fig 2) was removed by local excision, and the patient did well for several years, after which time a carcinoma developed (Fig 3) This was treated by gastric resection, and the patient is living and well three years after the second surgical procedure The third person found with cancer is also well, with no evidence of disease 10 years after operation This individual had two small polypoid carcinomas in the antral area (Fig 4) An unusual feature was the presence of innumerable plaques of carcinoma in situ, scattered over the lining of the stomach These were not appreciated until after the resected specimen had been studied pathologically

TABLE 1 —Fluoroscopic Survey

1 80% of eligible patients advised to take the test did so
2 Age range yr

45-49 (44 5%)	65-69 (1 5%)
50-54 (27 6%)	70 74 (1 0%)
55-59 (15 0%)	75-79 (0 3%)
60-64 (4 6%)	80 84 (0 3%)

3 Capacity
20-25 patients per hour per roentgenologist
4 Cost
Le s than chest PR film (0 50) (roentgenologist s stipend excluded)
5 Personnel required
Roentgenologists maid attendant
6 Equipment
200 ma radiographic fluroscopic unit spot film device
7 Preparation of patient
6-hour fast hospital gown
8 Unsatisfactory examinations
5% (obesity food residue slow emptying failure to fa t)

There was no mortality or untoward morbidity in association with 11 surgical procedures Dr Gordon McNeer, head of the Gastric Service, was the surgical consultant and the responsible surgeon

In one patient who was operated on, no tumor was found However, repeat x-ray studies after the gastrotomy and mucosal biopsy confirmed the preoperative diagnosis of a fold-like defect in the pyloric region (Fig 5) This was an early case, and one which today might have been carried without operation on a roentgenologic and gastroscopic diagnosis of hyper-rugosity [3]

Only individuals without gastric complaints were

From the Department of X-ray Diagnosis Memorial Hospital

accepted No compromise in this regard was permitted by the roentgenologist who conducted the fluoroscopic examinations When any doubt existed regarding symptoms, the patient was returned to the clinic with the suggestion that a regular gastrointestinal (G I) test series be requested As a result of these brief spot checks for the presence of significant gastric symptoms, when those patients found to harbor tumors were rechecked for appreciable complaints, none had to be excluded

TABLE 2 —Results of Fluoroscopic Gastric Survey

Total examinations	5,020
Unsatisfactory examinations	249 (4 9%)
Definitive examinations	4,771 (95 1%)
Negative	4,496 (94 2%)
G I series ordered	86 (1 8%)
Patients with proved tumors	11 (0 23%)
Myosarcoma, esophagus	1
Myosarcoma, stomach	1
Adenocarcinoma, stomach	1
Adenomatous polyps	7
Myoma stomach and adenomatous polyp	1
Total tumors found	12
Operation no tumor found	1
Operation refused	0
Additional lesions	
Zenker s diverticulum	
Herniation of gastric mucosa	
Hiatus hernia	
Hyper rugosity	
Gastric and duodenal diverticula	
Situs inversus	
Heart valve calcification	
Gall stones	
Duodenal bulb deformity	

To aid referring physicians in the selection of patients, the following criteria, any one of which would exclude an individual from the survey, were drawn up 1 Patients should be free of gastrointestinal complaints for at least one month 2 Symptoms excluding patients from the survey, such as (*a*) abdominal pain or discomfort, (*b*) loss of appetite, (*c*) dysphagia, (*d*) "gas" and rumbling, (*e*) sour stomach, (*f*) water brash and heart burn, (*g*) persistent indigestion or dyspepsia, (*h*) hematemesis, (*i*) nausea and vomiting, (*j*) melena, and (*k*) unexplained weight loss 3 Constipation, alone, need not exclude a patient from the survey

Inherent in the fluoroscopic method was a simple, direct, and effective patient-physician relationship If something unusual was visualized in the stomach during fluoroscopy, the patient was told on the spot by the roentgenologist that a puzzling finding had appeared and that a G I test series must be done promptly in order to study it adequately The appointment for this examination was made immediately, and the patient was assured that it would be done by the same roentgenologist If the G I test series confirmed the presence of an abnormality, the patient was promptly notified by the roentgenologist, and an appointment with the surgical consultant was arranged at once In case additional diagnostic work was required, it was carried out under the surgeon's direction, usually with the knowledge of the roentgenologist As soon as a decision to operate was reached, the situation was explained to the patient and to his personal physician, and all relevant details were settled

Photofluorographic Survey

The photofluorographic survey was begun in January, 1951, and continued for six years This program was, of necessity, less simple and direct than the fluoroscopic one, and as time went on it became more complicated Minor contributory factors were the indirect method and delay in reporting that were necessitated by use of roll film, the rotation of x-ray technicians, and the need for several roentgenologists because of the demands for double, independent readings, vacations, and similar matters Some patients were allowed to enter the survey program without proper concern for either their ability or willingness to cooperate Most examinees came from the cancer detection clinic

Drawbacks such as these could have been surmounted, but a major change, in contrast with the fluoroscopic survey, was introduced This was the introduction of certain procedures for the patient by the detection clinic Personnel of the clinic notified patients of any abnormal findings reported by the roentgenologist, made the appointments for a confirmatory G I test series, arranged consultations with surgical consultants or the patient's own physician or surgeon as the case might be, and explained reports to the patient In fact, all information and

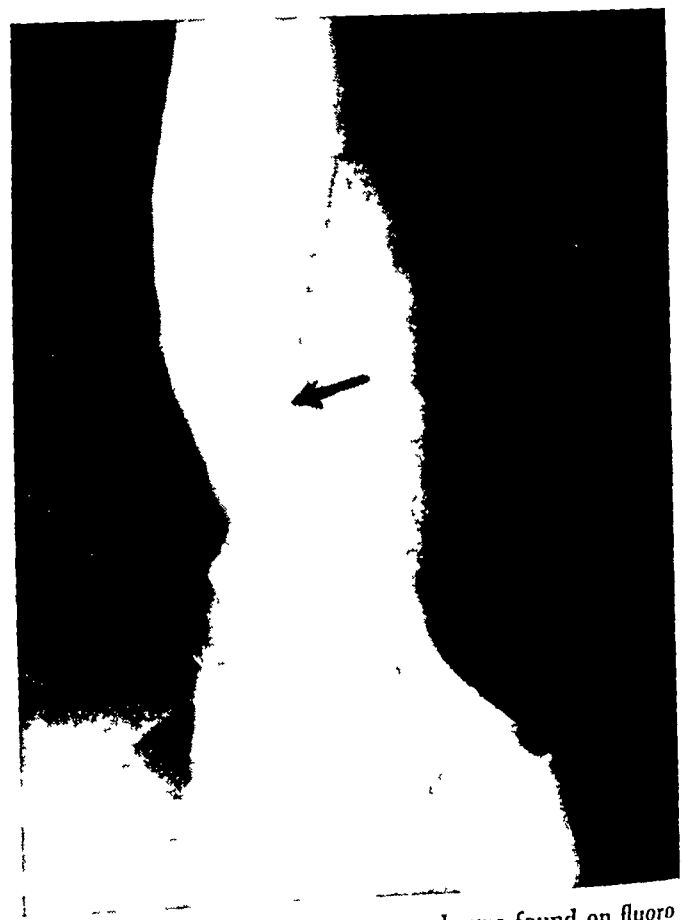

Fig 1 —Myosarcoma of lower esophagus found on fluoroscopic survey

decisions affecting the tumor suspect were handled by the clinic physicians Sometimes, opposing ideas concerned medical and surgical management

Tables 3 to 8 give the results of the photofluorographic survey Of the 579 patients advised to have a regular G I series, 564 returned for this examination Therefore 16, or 2 6%, of the tumor suspects were lost to investigation initially Because 8 5% of the tumor suspects were subsequently found to have a major abnormality, one or more cancers may have been lost to diagnosis at the outset Forty-eight patients were found to have lesions either specific for neoplasm or of probable significance for this, or other, serious disease (Fig 6 and 7) Seventeen patients came to operation One of the four cancers was symptomatic, another had pernicious anemia

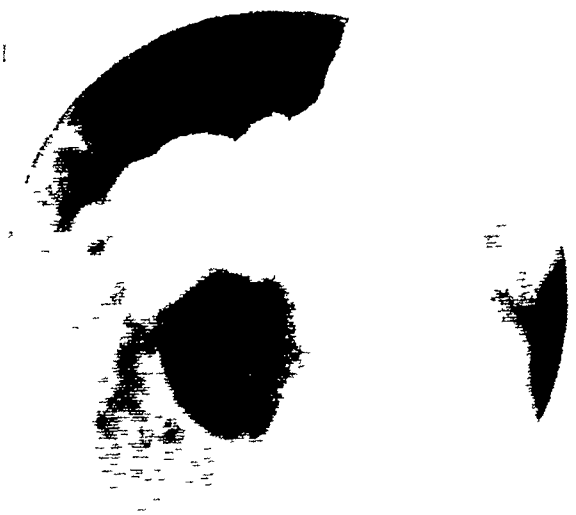

Fig 2 —Myosarcoma of stomach found on fluoroscopic survey

TABLE 3 —Summary of Results

1 20 875 surveys were performed on 15 750 patients As a result 579 (3 7%) patients were advised to have G I Series of whom 564 (97 4%) followed advice

2 G I series reports

Negative	235 (41 7%)
Hyperrugosity	176 (31 2%)
Incidental findings	105 (18 6%)
Major abnormal findings	48 (8 5%)
	564

3 The 48 major abnormal findings reported represent a percentage of 0 3% of the over all population screened Seventeen came to surgery The pathological reports were

Gastric myosarcoma	1
Gastric carcinoma	3
Gastric adenomatous polyps	8
Gastric ectopic pancreas	1
Gastric leiomyoma	1
Hypertrophic gastric mucosa	2
Hypertrophic Brunner's glands	1
	17

A review of the cases of the 31 tumor suspects who were not operated on showed that 10 patients refused surgery, 2 were lost to follow-up, 7 were being cared for by their own physicians, 1 had been killed accidentally, and 11 were procrastinating or had not decided Thirteen of these unoperated patients definitely have polypoid tumors, a few almost certainly cancers There are one patient with polyposis and two with gastric ulcerations, one of which apparently healed under treatment There were eight prepyloric narrowings On the basis of a recent study of this type of lesion, one can estimate that one or more have malignant disease [4] Seven of the 31 lesions are probably examples of hyperrugosity, although this diagnosis can hide adenomatous polyps or polypoid cancer

Nine of the 17 patients undergoing operation were treated elsewhere The reports on these procedures were often difficult to evaluate, and occasionally it was impossible to obtain all the basic information desired A number of the 31 tumor suspects were managed medically, either partly or completely, by their own physicians Patients having a family or personal physician were referred to him for treatment or advice All records and reports were made available to him, and, while the advice given by the physicians conducting the survey or by the clinic was usually supported, sometimes it was not For instance, two patients with polypoid tumors are being observed by their personal surgeons, immediate operation is advisable

Fig 3 —Adenocarcinoma of prepyloric part of stomach which developed in same patient as in Fig 2 several years after local excision of myosarcoma

The ability of the photofluorographic survey to detect gastric tumors was considered adequate be-

cause it revealed about the expected number of tumor suspects [5,7] The rate of detection for this particular survey must, however, be based on gastric defects whose precise nature in many instances is not ascertainable In other words, exactly how successful the photofluorographic detection was in terms of cancers found will never be known, because of the high proportion of the individuals and their medical advisors who declined both operation and adequate follow-up It became apparent that the detection aspect was sound, but the organizational part of the survey failed

As was true with the fluoroscopic survey, the number of incidental findings revealed photofluorographically was considerable, nor were the lesions necessarily insignificant ones A sanguine attitude toward hiatus hernia as a frequent cause of important symptoms developed when its high frequency in asymptomatic adults was demonstrated As a result of both surveys, an evaluation of the large mucosal fold pattern or hyper-rugosity was carried out [3] Another by-product of these gastric surveys was an appraisal of prepyloric narrowings,[4] occasionally uncovered in asymptomatic patients

TABLE 4 —Reexamination Rates of Patients by Age and Sex

Sex	Age, Yr									Total	
	Under 40	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75 & Over	No	%
					Initial Examination						
Male	21	376	1 595	1 600	1 193	663	285	113	24	5 870	37 3
Female	10	441	2 844	2,982	2 024	1 020	418	111	30	9 880	62 7
Total	31	817	4,439	4,582	3,217	1,683	703	224	54	15,750	
					Return Examination						
Male	0	20	720	1 470	1,126	727	288	105	41	4 497	40 4
Female	2	19	1 098	2 358	1,776	907	340	103	25	6 628	59 6
Total	2	39	1,818	3,828	2,902	1,634	628	208	66	11,125	
Grand total	33	856	6,257	8,410	6,119	3,317	1,331	432	120	26,875	

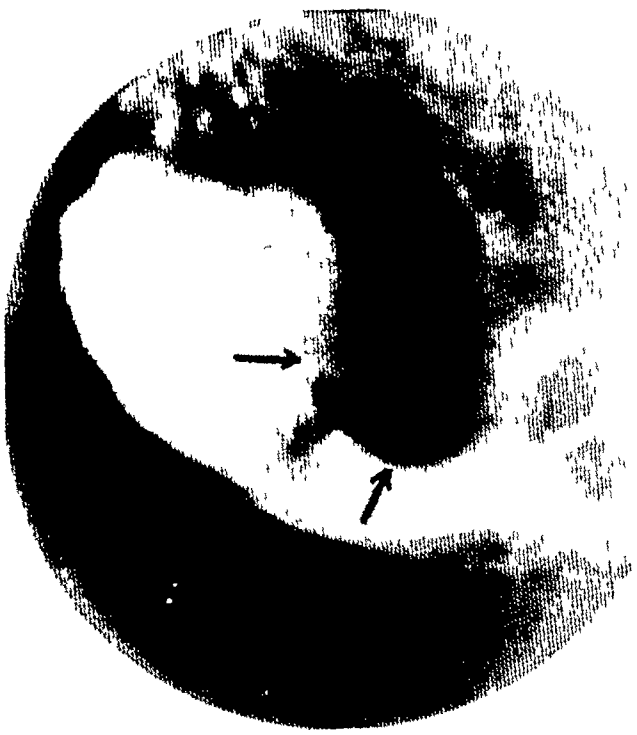

Fig 4 —Polypoid carcinoma of stomach found on fluoroscopic survey Numerous other plaques of carcinoma-in-situ were found at surgery

Evaluation of Roentgenologic Gastric Surveys

The literature on roentgenologic surveys for gastric neoplasms, while not extensive, is controversial An objective review of accomplishments in this field has been presented by Gary and Schatzki [8] Rigler [9] has also discussed roentgenologic surveys A thorough, detailed coverage of nearly all facets of roentgenologic gastric surveys was made by Wigh and Swenson [5] Their article, in particular, deserves full consideration by anyone seriously interested in the subject These writers, while restating the need for better control of gastric neoplasms, demonstrated that the curability of survey-discovered, asymptomatic cancer is assured in a high percentage of cases (with an estimated 45% of five-year survival, in contrast with 4 to 8% for symptomatic cancer)

With the exception of a few,[10] most investigators who have been actually responsible for surveys are favorable to their continuance, their main objective being to provide fuller evaluation of the procedure [8,1,5,11,9] Opposed, are the opinions of physicians, who lack practical experience in this field

Several survey projects of ambitious scope have been dropped [5] The roentgen surveys for gastric cancer detection at Johns Hopkins Hospital and Jefferson Hospital have ended A survey that was conducted in North Carolina and sponsored by the American Cancer Society [12] and similar projects probably have lapsed without a published record [5]

Presumably State, Rigler, or their associates [13,14] continue to function effectively in this area One can, however, justifiably question whether their program is a true roentgenologic survey, such as the one considered here These workers do a full G I series on a highly selected group of patients, the basis for selection not being roentgenologic As Wigh and Swenson [5] state, there are features of this plan which are less advantageous than those of a typical roentgenologic gastric survey of either the fluoroscopic or the photofluorographic type

Roentgenologic surveys cannot be ends in themselves It is necessary that they pass a stricter judgment and a higher standard than merely the number of tumor suspects they reveal The gastric tumors

Fig 5 —Localized hyper-rugosity Biopsy showed no tumor Found on fluoroscopic survey

found must be not only asymptomatic in type but resectable, with a sufficient number of them having nodes free of disease to insure a high rate of curability When the tumor suspects decline treatment, a survey has failed

TABLE 5 —Classification of Reports

	No of Examinees		
	Male	Female	Total
Initial Examination			
Negative	5 686	9 605	15 291
G I series advised	136	199	335
Repeat survey advised	48	76	124
Total	5 870	9 880	15 750
Return Examination			
Negative	4 346	6 449	10 795
G I series advised	117*	127*	244
Repeat survey advised	34	52	86
Total	4 497	6 628	11 125
Report After Survey			
Negative		26 086	
G I series advised		579	
Done		564 (97 4%)	
Done in x ray department		543	
Done elsewhere		21	
G I series failures		16 (2 6%)	
Repeat survey advised		210	
Total		26 875	

* Included are 15 repeat G I series on 15 male patients and 10 repeat G I series on 9 female patients (patients who had previous G I series as a result of survey)

All patients must be asymptomatic The justification of surveys stems from this principle Unless this concept is accepted completely and generally, survey projects will continue to be the subject of argument Adherence to this conviction, whose truth seems self-evident to us, leads to disagreement with other workers While some have examined patients with no regard for their symptoms—'no digestive symptoms of appreciable significance,'[11] and 'no symptoms which particularly attracted his attention or that of his physicians,'[13 15 11 5] we believe that only one standard should be followed

This is a matter of serious medical responsibility The only reason for roentgenologic surveys is that they make possible the detection of the small curable lesions when no other practical means of identification exists Consequently, there can be no

Fig 6 —Example of carcinoma of antral part of stomach discovered in 45-year-old asymptomatic male on photofluorographic survey, resected

valid excuse for admitting to gastric surveys a fringe or borderline group consisting of the mildly symptomatic These individuals must not be enticed from the realm of clinical medicine in which alone are found the talents and facilities to cope with the challenge of the patient with slight, but potentially significant, complaints

It is undoubtedly true that there are but few persons who do not suffer at one time or another with symptoms referable to the stomach Physicians should, however, be able to separate the really asymptomatic from persons with potentially significant complaints In case of doubt, the patient

should be excluded from the survey and a regular roentgenologic examination advised The requirement of one month's freedom from all gastric symptoms seems to be a practical approach

The point has been made that the selection of only the totally asymptomatic would be too restrictive, leading to an insufficiency of material The experience presented here does not support this Furthermore such a contention would seem to be based upon spurious reasoning, the implication being that, if one cannot find sufficient suitable material, one should include the unsuitable

The desire of patients as well as their physicians to capitalize on a readily available, inexpensive, short-cut x-ray examination is understandable If this is permitted, however, the patient is being cheated, because he is not receiving the best possible roentgenologic opinion The respect of the profession for surveys suffers because a trust is being violated Eventually, there is a withdrawal of medical support for, and open opposition to, surveys

Fig 7 —Polypoid lesion of antrum detected on photofluorographic survey Histological diagnosis ectopic pancreas

Attempts are occasionally made by referring doctors to secure detailed reports embodying descriptions of conditions such as hiatus hernia, duodenal bulb abnormalities, enlargement of heart, liver, or spleen, duodenal diverticulum, and similar disturbances Many of these conditions are difficult to evaluate even with the regular G I test series Certainly, all incidental findings of definite significance should be reported, but any attempt to use the x-ray survey to fill the purposes of the standard roentgenologic diagnostic procedure indicates a lack of understanding of survey objectives

TABLE 6 —Distribution of Patients Having G I Series

	Age, Yr										
	Under 40	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75 & Over	Failures	Total
				Initial Series							
Male	1	3	39	36	27	12	10	4	1	3	136
Female	1	7	46	57	45	20	12	1	1	9	199
Total	2	10	85	93	72	32	22	5	2	12	335
				Return Series							
Male	0	0	21	28	30	19	12	4	2	1	117
Female	0	0	15	42	39	19	5	5	0	2	127
Total	0	0	36	70	69	38	17	9	2	3	244
Grand total	2	10	121	163	141	70	39	14	4	15	579

The success of the fluoroscopic program in getting patients to follow the prescribed treatment answers those who question that asymptomatic individuals can be made to accept operation [10] Preliminary orientation and continuous explanation are due those undergoing the various procedures

The fact that these and other roentgenologic gastric surveys, both fluoroscopic and photofluorographic, have usually detected the statistically indicated number of gastric tumors refutes arguments that have been raised to the contrary Actually, an unexpectedly high percentage of adenomatous polyps and other small lesions has been noted

The surprisingly high incidence of polyps opens several avenues of speculation about the significance of this finding These neoplasms certainly deserve primary consideration as precancerous lesions [5] The polypoid form apparently is the commonest morphology assumed by early asymptomatic gastric cancer There is no practical way for these small lesions to be uncovered except by roentgenology

Over-all simplicity, patient acceptance, a reliable detection rate, low cost, infrequency of false-positive results, and similar important feaures must be fully considered in the evaluation of any method of surveying Both the fluoroscopic and photofluorographic types are generally satisfactory (Table 9)

Arguments continue concerning the relative dependability of the fluoroscopic and photofluorographic methods for the detection of small silent tumors of the stomach Experience with both convinces us that the fluoroscopic survey, when done by an experienced examiner, is the more reliable It is also cheaper, quicker, and simpler Standard,

generally available x-ray equipment can be used By contrast, the photofluorographic unit requires a special type of camera and x-ray equipment, so that additional use of the equipment for routine work is limited The fluoroscopic method insures an effective patient-physician relationship, while the photofluorographic system seems to foster delays of various sorts We cannot agree with the assertion that with the fluoroscopic method more of the radiologist's working time is required per patient If double, independent readings are done on the photofluorographic survey, the roentgenologist's total working time will be about equal for the two methods The value of the film as a permanent record has not been impressive

It seems true that small polypoid lesions in the stomach will occasionally escape detection by photofluorography Certainly, they sometimes do so on routine, table top films of the G I series, in spite of the fact that they were easily found fluoroscopically and were recorded on spot films Rarely, indeed, does the opposite situation hold This demonstrates that use of the spot-film device during the fluoroscopic survey often obviates the need for a confirmatory G I series

The age distribution of the patients on both surveys was not slanted favorably toward the detection of gastric cancer due to the high percentage of those under 55 years of age The sex ratio was also adverse, with far fewer males than females These two factors were even less advantageous in the fluoroscopic survey Similarly, a high percentage of resurveyed patients tends to lower the incidence of neoplasms [5] Many of the unsatisfactory studies in both surveys were not subjected to reexamination

Wigh and Swenson state that 4 to 12 r is the range of radiation incurred by the patient with their techniques Studies made by the Department of Physics, Memorial Center, revealed that patients received approximately 2 r per film on the photofluorographic unit with use of a Schmidt-type camera, which was identical with that described by Roach and co-workers [16] and Wigh and Swenson

TABLE 7 —Results of G I Series

	No of Patients		
	Male	Female	Total
Negative	82	153	235
Hyperrugosity	94	82	176
Polypoid lesion	4	13	17
Prepyloric narrowing	4	2	6
Intraluminal mass	0	1	1
Gastric ulcer	3	1	4
Polypoid lesion or hyperrugosity ( )	9	7	6
Organic lesion (?) no follow up	1	1	2
Soft tissue masse	0	1	1
Prepyloric narrowing with polypoid defect	0	1	1
Miscellaneous findings	52	53	105
Total	249	31	264

With our present apparatus and techniques, the dose in a fluoroscopic survey at the table top is 3 to 10 r, with an average of 5 r Fluoroscopic fields, however, are much smaller than the fixed photofluorographic ones With the fluoroscopic image amplifier field size can be standardized, and the dose at fluoroscopy can be cut at least in half However, we have found this attachment to be rather bulky and somewhat difficult to work with routinely The addition of 1 or 2 spot films adds but 2 to 5 r in a very small field

TABLE 8 —Number of Survey Studies per Patient

No of Studies	Total	
	Examinees	Examinations
1	9 363	9 363
2	3 297	6 594
3	1 779	5 337
4	997	3 988
5	291	1 455
6	23	138
	15,750	26 875

Because patients are in the upper age groups, gonadal radiation has little practical significance Furthermore, it seems impossible to implicate yearly fluoroscopic or photofluorographic surveys as a factor of consequence in somatic radiation exposure The fluoroscopist, if he is observant of all the rules of radiation protection, will suffer no untoward exposure

Wigh and Swenson concluded by urging radiologists to accept the challenge posed by roentgenologic gastric surveys and institute a nation-wide program of photofluorography They demonstrated the general feasibility of the approach

Many different factors have contributed to the termination of roentgenologic gastric surveys, also, poor planning, lack of organization, unsuitability of mass-survey techniques for the detection of gastric tumors, and the lack of support by many medical groups were commonly encountered Attempted gastric roentgenologic surveys needed help and understanding in an enlightened and effective way, but sometimes, in fact, outside influences became meddlesome rather than supportive

Apparently, it is in radiology where the crucial role in gastric surveys remains Generally speaking, large institutional x-ray services usually possess both the financial resources and other facilities that should be applied toward the improvement and extension of radiologic service and research Therefore, hospital x-ray departments are the logical place for a thorough and final evaluation of surveys The fluoroscopic method is helpful

It is believed that the results so far obtained justify that hospital x-ray departments launch roentgenologic gastric surveys beginning with suitable clinic patients 55 years or older If only five patients are examined per day, one cancer of the stomach, several adenomatous polypi, and a number of significant incidental findings will be revealed in the course of one year This detection rate, for

the time, effort, and expense entailed, approximates that of the average cancer detection clinic for a number of tumors and exceeds it for others [2]

This project is a public service which radiologists can initiate and carry forward Conducting a roentgenologic gastric survey tends to improve the level of gastric roentgenology in a department, and the program is both a stimulus to younger radiologists and a source of teaching material otherwise not available When surveys disclose resectable neoplasms, cooperation of surgeons is essential

We are convinced that, if this general plan is carried out, a practical and effective way on the local level will have been found to attack the problem of gastric neoplasms If enlarged to a nationwide scale, perhaps one-fifth of the annual 28,000 deaths from gastric cancer can be avoided

TABLE 9 —Comparison of Fluoroscopic and Photofluorographic Surveys

	Survey	
	Roentgenoscopic	Photofluorographic
Cost per patient (total), $	1 00	1 47
Regular G I series done %	1 7	2 1
Rate per hr	20 to 2,	6 10
Equipment	Conventional	Special
Radiation to patient r	5 to 15 (small fields)	5 to 15 (fixed large fields)
Radiation to roentgenologist	Safe	None
Roentgenologist's time min per patient	2 3	Same if double readings
Incidental findings	Significant	Significant
Personnel needed	Roentgenologist maid attendant	2 roentgenologists x ray technician
Permanent record	Spot film	Roll film
Report to patient	Immediate direct	Delayed, indirect
Refused operation	None	Many
Tumors proved	12 in 5,020 examinations	13 in 26,875 examinations

Summary and Conclusions

This study reports on fluoroscopic and photofluorographic gastric surveys with a combined total of 31,895 examinations Both methods revealed about the expected number of gastric tumors or tumor suspects

The fluoroscopic survey was uniformly successful in bringing all patients with tumors to operation This was largely due to the close patient-doctor relationship embodied in this method Organizational deficiencies of the photofluorographic survey failed to induce many of the tumor suspects to accept proper treatment, and it is largely for this reason, that this survey is considered unsuccessful

Radiation exposure to patients and to examiners need not constitute a hazard in either method The fluoroscopic method, compared with the photofluorographic, has a number of apparent advantages

Only asymptomatic patients should be surveyed No attempt should be made to extend the survey toward the purposes of a standard medical diagnostic procedure The lack of success of gastric roentgenologic surveys usually is related to organizational practices and not to the tumor detection capabilities of either the fluoroscopic or the photofluorographic method The incidentally revealed findings markedly increase the value of gastric surveys

Radiologists should initiate gastric surveys on the local level, employing the facilities and resources that are available in most hospital x-ray departments Radiology needs the enlightened support of other medical groups in this endeavor Roentgenologic surveys are never ends in themselves Their true value rests upon the number of cured silent neoplasms they reveal

444 E 68th St (21) (Dr Sherman)

Most of the patients used in this study were from the Strang Cancer Prevention Clinic

The costs of the fluoroscopic survey were paid by Dr E L'Esperance The data on the photofluorographic survey were assembled by Dr Genevieve Bader, Associate Physician, Strang Clinic

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The "Toxin-Antitoxin" Phenomenon in Burned and Injured Human Subjects

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The presence of toxins in the blood of burned or otherwise injured patients was indicated by the demonstration of cytotoxic effects on HeLa cells, cytolytic effects on red cells of other burned or injured patients, and precipitogens against serums from patients with healed burns Such serums were shown to contain antitoxic antibody like substances by demonstrating their ability to neutralize the cytotoxic effect on HeLa cells and by demonstrating the presence of hemolysins and precipitins In preliminary clinical trials the transfusion of blood or plasma from donors with healed burns to critically toxic burned or injured patients was followed by prompt improvement Serums obtained from the recipients after such transfusions were no longer toxic to tissue cultures The authors recommend further clinical trials of antisera of known titer from persons with healed burns

THE existence of a specific "toxin" following burning has generally been denied,[1 2 19 20] (The term "toxin' is used in its broadest sense, i e, any substance or group of substances that produce nonphysiological effects on cells in vitro or in vivo Similarly, the term 'antitoxin" is used broadly to include any counteraction in vivo or in vitro to these 'toxins') Davis and Abbott,[1] in a review of the subject (1956), state Although the existence of a toxin has not been completely ruled out, none has been found to date and a careful study of the clinical and laboratory data usually reveals the cause of death"

The majority opinion is that soon after burning there is loss of fluid, colloids, and electrolytes If the burn is extensive and severe, there results a diminished blood volume, a diminished cardiac output, and, finally, a collapse of blood pressure with accompanying toxic manifestations and death The late toxic manifestations (after two days) and death usually are explained by secondary infection

Experimental (dogs Gilmore,[3] and monkeys Lasker and Fox[4]) and clinical studies carried out to correct the fluid, colloid, and electrolyte loss, plus antibiotics and chemotherapeutic agents to counteract infection, have resulted in only a slight improvement of the mortality following severe burns In a study at the Massachusetts General Hospital[5] on the mortality rate in 785 cases of burns admitted to the hospital, it was found that during the period 1939 to 1942, when the method of treatment was more or less primitive, the mortality rate was 15 6% (of 133 cases) During the period between 1943 and 1954 when there were adequate intravenous therapy, transfusions, antibiotics, aseptic care, attention to nutrition, and early excision and grafting, there was only a 5% decline in the mortality rate When the latter period is further broken down to differentiate changes in antibiotics and newer forms of therapy, it was found that between 1943 and 1947 the mortality rate was 10 7% (of 248 cases) and from 1948 to 1954, 10 4% (of 355 cases) The mortality rate was found to be related directly to the severity and extent of the burn Younger individuals (0 to 15 years old) and older persons (55 and over) were less resistant than the middle-aged groups The sharp rise in the mortality rate began with 30% or more of body surface burns (second and third degree) Similar results were obtained at the Brooke General Hospital[6] where, likewise, the most modern methods of treatment were employed plus the fact that therapy was instigated promptly When approximately 50% of the body surface is involved in severe burns, the mortality rate is approximately 50%

Since the mortality following severe burns remains high, notwithstanding replacement therapy, aseptic technique, and antibiotics, other factors causing this mortality must be considered One of these is that as a result of the degradation products resulting from burning of the skin and other tissues,

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a specific "toxin," or "toxins," is produced which enters the circulation and contributes to the toxic manifestations and death of the individual In 1937 Rosenthal described the presence of a "toxin" in the blood of burned shoats, adult pigs, guinea pigs, and human beings[7] An "antitoxin" likewise was described in the blood of healed burned pigs and human beings[8]

TABLE 1 —Determination of "Toxins" in Blood of Burned or Injured Human Subjects

			"Cytolysins" (Red Blood Cells)				"Cytotoxins" (HeLa)	
Age, Yr	% Burn	Fracture	Time Drawn, Days	(1)	(2)	(3)	Time Drawn, Days	Absent or Present
9	27	—	0	—	—	—	1	+
13	40	—	0	—	—	—	14	+
9	46	+	0	4*	2	—	13	+
12	19	—	1	—	—	—	2	+
13	25	—	1	—	—	—	1	+
13	44	+	1	—	—	—	1	+
13	53	—	1	8	8	8	1	+
9	63	—	1	16	4	8	9	+
9	23	H	2	—	—	—	2	—**
8	55	—	9	8	8	2	2	+
13	61	—	9	4	4	8	1	+
14	—	MF	1	—	—	—	2	+
10	—	MF	1	—	—	—	1	+
10	—	MF	1	—	—	—	1	+
13	—	MF	9	8	4	8	1	+

(1) Patient's sera + patient's RBC + complement
(2) Patient's sera + other burned patient's RBC + complement
(3) Patient's RBC + healed burn sera
* Titer or dilution of sera
** With homogenate of RBC inhibition occurred
MF—Multiple fractures H—Hemorrhages — Negative + Present

In order to isolate this "toxin" free of blood, a direct in vivo method was developed in rats to obtain diffusates from burned skin circumventing the blood[9,21] This material proved to be toxic and lethal to mice and rats either in acute or chronic experiments[10,22] When injected into rabbits, precipitins were produced against this "toxin" and agglutinins and "hemolysins" against the red cells of recently burned rats In a preliminary experiment, the rat "toxin" antisera of the rabbits protected against rat "toxin" in mice The demonstration of a "toxin" followed by autoimmunization likewise was detected by serologic means in the blood of burned rats and mice[23]

At this stage of the experiments with the demonstration of burn "toxin-antitoxin" in animals and human beings, the Our Lady of the Angels School fire occurred in Chicago (Dec 1, 1958) One of us (S R R) presented his results to the medical staff at St Anne's Hospital and suggested that blood be collected from individuals who had been burned by various means or who had had extensive injuries, but in whom these injuries were completely healed, and that such whole blood or plasma be transfused into the burned victims at regular intervals[11] The medical staff at St Anne's Hospital elected to do this for selected severely burned patients under their care The problem then was to obtain sufficient healed burned donor blood, as certain criteria had to be met—the donors had to meet the usual standards of the American Blood Bank Association and some arbitrary classification had to be set up for defining suitable donors The following categories were established for blood donors category 4—persons who had had 25% or greater body area burn within 1 year, category 3—persons who had had 50% or greater body area burn within 2 to 5 years, category 2—persons who had had 50% or greater body area burn within 6 to 10 years, category 1—persons who had had 50% or greater body area burn within 11 years or longer

By a publicity campaign in the Chicago area and elsewhere,[11] a limited amount of blood was obtained to meet the above requirements

No attempt will be made in this report to consider the management of these burned or injured patients either locally or generally Many of the children sustained fractures, contusions, and abrasions in jumping from upper stories of the school This phase of the treatment will be reported by the staff of St Anne's Hospital All that will be considered here are studies pertaining to the "toxin-antitoxin" phenomenon in burned human subjects Another series of burned patients from the Cook County Hospital were studied serologically over periods of 0 to 135 days following injury

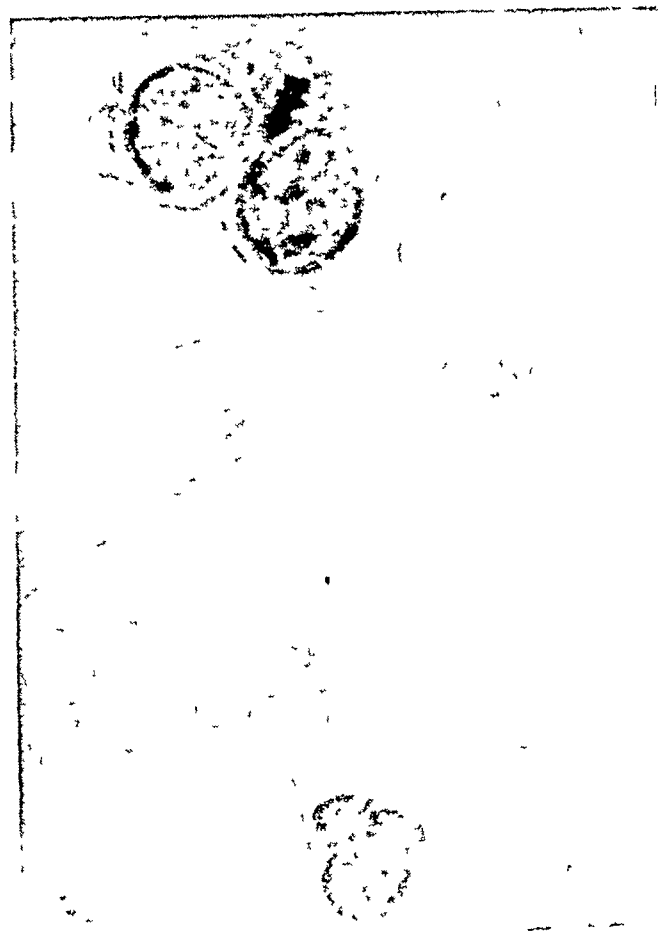

Fig 1 —HeLa cell culture (72 hours) grown in 0 05 ml pooled acute burn sera plus 0 2 ml pooled normal sera Note rare rounded cell indicative of no growth (× 600)

Plan of Procedure

The major premise of the school fire undertaking was to help the critically ill children by the use of blood or plasma from healed burned donors All other considerations were incidental and at no time were laboratory specimens taken expressly for study ' Use was made of blood specimens after the normal routine laboratory procedures had been completed Blood or plasma was administered according to the private doctors orders, but, when available, instead of using routine blood donors, blood donors with healed burns were substituted

The clinical subjective findings before and after transfusions were noted by two doctors and recorded The routine temperature, pulse, and respiration were carried out by the nursing staff Urine and blood studies were performed as indicated in critically burned subjects

In both St Anne's and the Cook County Hospital patients, the presence of toxin" in the blood was determined by one or more of the following tests—cytotoxic effect on HeLa cells, cytolytic effect on red blood cells, and the presence of precipitogens in healed burn sera The appearance of antitoxins and/or "antibodies" was detected in the sera of convalescent burned and healed burned persons by their anticytotoxic effect on HeLa cells and the appearance of 'hemolysins" and precipitins

Demonstration of "Toxins"

'Cytotoxins" (HeLa Cells)—The sera of acutely burned individuals, when tested as is routine for determining the presence of virus on 48- to 72-hour monolayers or sheets of mature cells, had little or no effect However, when a suspension of HeLa cells in Eagle s media was incubated with 0 2 ml of sera from extensively burned or injured individuals, practically no growth occurred after 72 to 96 hours The exact method and detailed results have been reported elsewhere [12, 24] Table 1 gives the results of some of the severely burned and/or injured children in the school fire In four cases there were no second degree burns, but there were multiple fractures plus abrasions and contusions Fourteen of the 15 sera inhibited HeLa cell growth The one exception was a child who had a 23% body burn plus internal thoracic hemorrhage However, homogenizing his red cells by sonic vibrations and testing this material proved inhibitory to HeLa cells These sera were tested for their cytotoxic effect on HeLa cells about 13 to 14 days after they were drawn However, the sera of four of the critically ill drawn 11 to 16 days after injury and tested within a few days likewise were cytotoxic As little as 0 05 ml of the pooled toxic sera had this effect (fig 1) For controls, sera from febrile (15 cases) or asymptomatic (115 cases) normal young adult males were not found to be inhibitory To simulate storage conditions of the burn sera, aliquot specimens obtained from 12 asymptomatic cases without previous history of burns or trauma were allowed to remain with clot for 13 days at 4° C At the end of this period these sera did not inhibit HeLa cell growth

"Cytolysins" (Red Blood Cells)—No agglutinins or 'hemolysins" were detected when patients red cells were added to healed burned donor sera as was the case in animal experimentation However, when patients' cells were added to healed burned donor sera or to patients' sera plus complement (guinea pig) and incubated for 12 to 24 hours at 37° C , hemolysis, but not agglutination, was found The exact method and detailed results will be published elsewhere [25] In the six burned or injured children on the critical list, cytolysins were found No hemolysis occurred without the addition of complement or when normal red blood cells or sera were used It will be noted from table 1 that the sensitivity under these conditions was not as great as with the HeLa cell technique These sera and red blood cells were tested one to two weeks after drawing As will be discussed below, with sera and cells tested shortly after drawing and 48 hours or more after burning, the sensitivity was greater The sera of non-burned individuals (33 cases) tested for 'hemolysins" with red blood cells of acutely burned or normal individuals were all negative

Fig 2 (case 2) —HeLa cell culture (72 hours) grown in 0 2 ml acute burn sera (14 days after burn and before transfusion) Note few rounded cells indicative of no growth (× 200)

Demonstrations of "Antitoxins"

HeLa Cells—In four critically ill subjects one or two tests of their sera before transfusion with healed burn sera were found to be inhibitory to HeLa cell growth (fig 2), whereas after transfusion (immediately or several days later) failed to inhibit HeLa cell growth (fig 3) In a non-critical case in

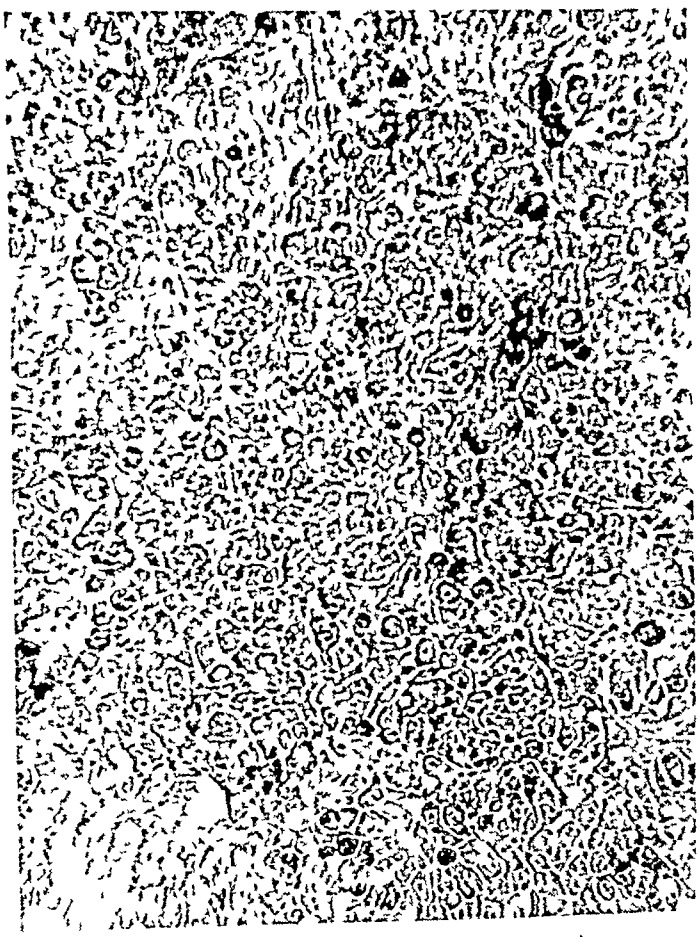

Fig 3 (case 2)—HeLa cell culture (72 hours) grown in 0 2 ml acute burn sera (15 days after burn) from same patient as in figure 2 but several hours after transfusion of healed burn sera Note continuous monolayer of polyhedral cells indicative of maximum growth (4+) (× 200)

which no cytotoxicity was noted, shortly after debridement and reduction of a wrist fracture, serum cytotoxicity appeared In another instance (non-critical) in which cytotoxicity was noted, it disappeared spontaneously only to reappear with clinical toxicity In vitro tests incubating aliquots of toxic sera plus aliquots of healed burn sera (categories 4 and 3) and determining the effect of this combination on the growth of HeLa cells demonstrated a neutralization of the cytotoxic effect of the toxic sera (fig 4) present in a degree not present in sera of subjects without a previous injury or burn (23 normal subjects tested) The neutralizing effect was found to the same degree in the gamma globulin fraction of healed burn sera (category 4) and not in the gamma globulin of individuals without a history of previous injury or burn

"Hemolysins"—Healed burned donor sera (categories 4 and 3), when tested with red blood cells of burned persons plus complement, gave hemolysis in five of the six on the critical list The negative result was obtained in a child whose blood was obtained the same day of the burn The sera of non-burned or injured persons did not have this property (33 cases)

Time of Appearance of "Toxin" and "Antitoxin" in Burned Individuals (Cook County Hospital Patients)

According to a definite design of study, blood was drawn from burned patients soon after entering the hospital and at weekly and then bi-weekly intervals when possible

Twenty-four burned subjects varying in age from 14 months to 48 years and sustaining second or third degree burns from 2 to 65% of body surface were studied (table 2) In eight subjects, two or more bleedings were made available In six subjects who sustained 5 to 65% of body surface burn and in whom blood was drawn 1 to 24 hours after injury, none developed detectable "cytolysins" or precipitogens (ring test) In nine subjects with 2 to

Fig 4—HeLa cell culture (72 hours) grown in 0 05 ml pooled acute burn sera (same as in fig 1) plus 0 2 ml pooled healed burned donor sera Note monolayer of polyhedral cells (3+ to 4+ growth) (× 600)

28% body surface burn in whom blood was obtained 25 to 48 hours after burning, two (7 and 28% body burn) were positive (22%) In eight subjects with 5 to 65% body burn tested from 49 hours to 6 days following injury, six were positive to one or both tests (75%) A 4% burn, tested 51 hours after the

injury, was positive to both tests During the period 7 to 35 days following burning (4 to 25% body burn), nine subjects in whom 44 tests were run were all negative for "toxins' ('cytolysins" and precipitogens) and antibodies (precipitins and/or hemolysins') 'Antibodies' "cytolysins" and precipitins were detected in the two subjects in whom blood was drawn from 40 to 135 days after burning (8 tests)

Clinical Results

Because of the limited burned-donor blood available, especially Rh negative blood, only a limited number of transfusions with healed burn blood or plasma were given The results to be considered thus will be confined to short periods of time before and after a series of such transfusions Clear-cut results were seen when at least 500 ml of whole blood or 250 ml of plasma were given in a 24-hour period Six critically ill children received this amount of blood or plasma 14 to 29 days after the fire The clinical impression was that there was an improvement in all, in some it was described that a 'crisis" had occurred within hours after the transfusion (in three subjects who received more than minimal amounts of blood or plasma) Although new antibiotics were constantly being tried and must be considered in evaluating the clinical effects of the healed burn sera, the fact that the antibiotics were never the same in each subject and that in every case the clinical effects occurred within hours after the administration of the healed burn sera speaks for a specific effect of the sera

The case histories in the three patients who received three to six transfusions within a six-day period (i e, more than the minimal) are given below

CASE 1 —Nine-year-old female, extent of burn—46%, and fracture

Condition of child before burned donor transfusions (Dec 14, 1958) —The child had received up to this point six units of regular blood bank plasma and five units of blood distributed on a daily basis On Dec 12 she received one unit of blood and on Dec 13, two units of plasma The child was markedly restless and irritable, any change of position would audibly exaggerate the irritability Interest in her environment was slight, her appetite was poor, she slept only in snatches, movements of extremities were limited and painful She appeared to be in an extremely toxic condition, with marked edema in the face, neck, and extremities (site of burns) Her temperature ranged from 101 to 105° F (38 3 to 40 6° C) (Dec 13 and 14)

Transfusion with 400 ml burned donor blood was begun Dec 14 at 7 10 p m

Condition of child on Dec 15 at 11 00 a m — Nurse and parents were not aware that type of blood of transfusion was different from those given previously The changes listed below were noted by the parents, the nurse, and two physicians who had seen the child before and after the transfusion

A marked and sudden change for the better was noted Shortly after the transfusion the child fell asleep and slept for five hours—this was the first time she had really slept for days Her irritability was so reversed that she began to dictate letters for her friends to her father Her appetite was markedly improved, she had less pain, and the spontaneous mobility of her extremities was definitely increased

On Dec 15 she received no transfusions of any kind That night she slept about five hours

TABLE 2 —Time of Appearance of 'Toxin" in Burned Human Subjects

Time	Extent of Burn	Case No	Cytolysins % Cases Pos	Cytolysins Tests No	Cytolysins Tests Pos	Cytolysins Tests Neg	Precipitogens % Cases Pos	Precipitogens Tests No	Precipitogens Tests Pos	Precipitogens Tests Neg
0-24 hr	>65	6	0	6	0	6	0	6	0	6
25-48 hr	2 28	9	22	11	4	7	12	8	1	7
49 hr-6 da	>65	8	75	15	11	4	83	6	5	1
7 35 da	4 25	9	0	28	0	28	0	16	0	16

On the morning of Dec 16 the child was holding her gains well Toward noon, and increasing with evening, she again became restless and irritable, her appetite slackened, her mobility decreased, and the parents were notably disturbed and discouraged At 8 50 p m 150 ml of burned blood donor plasma was started and at 10 15 p m the infusion was complete Soon after the transfusion the child fell asleep and slept all night—this was the longest time she had slept during her illness At 10 00 a m on Dec 17 the impression of the parents, nurse, and/or two physicians was as follows

The child was better than she had ever been, more alert, more spontaneous movements, less pain, good appetite What was particularly striking was that the face and neck, which had been markedly swollen, had receded to such an extent that they were of normal size A decrease in the swelling had been suspected for the previous two days Her temperature was 101 8° F (38 8° C) (rectal)

Dec 17—Transfusion with 250 ml of burned donor plasma

Dec 18—All gains hold, child ate a fair breakfast of cereal and juice, drinking well, not so difficult a nursing problem, parents in relatively good cheer, neck and face edema still down

Dec 18—Transfusion with 250 ml of burned-donor blood

Dec 19—Transfusion with 250 ml of burned-donor blood and two units of blood bank plasma

Dec 20—Transfusion with 250 ml of normal donor whole blood and 150 ml of burned donor plasma

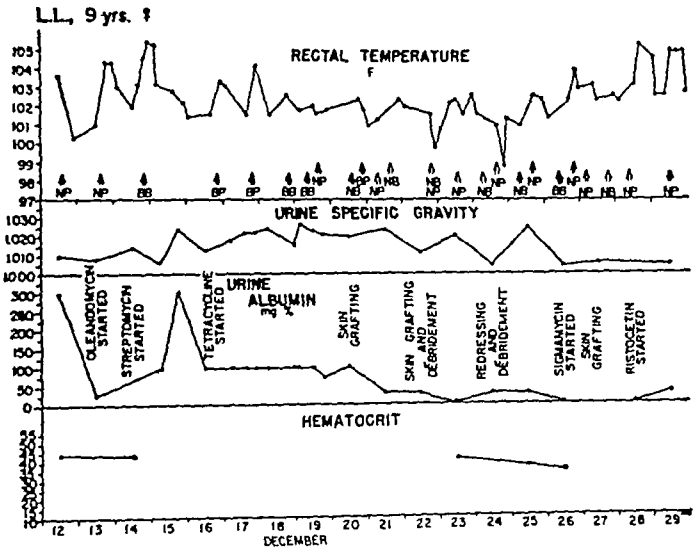

Fig 5 (case 1) —Temperature and selected clinical laboratory determinations *NP*, normal plasma, *BP*, burned donor plasma, *NB*, normal blood, *BB*, burned donor blood, and arrow indicates approximate time of administration

Dec 26—Transfusion with 250 ml of burned-donor blood and 250 ml of blood bank plasma Child doing well, face—no edema (only exposed part), child has been skin-grafted, mother and father in good cheer (a good sign)

The temperature and selected clinical laboratory studies are plotted in figure 5 After transfusion with burned-donor blood and plasma from Dec 14 to 20 there was a fall in temperature and urine albumin Administration of three new antibiotics was initiated from Dec 13 to 16

Case 2 —Thirteen-year-old male, extent of burn—61%

Condition of child before burned donor transfusions (Dec 14, 1958) —Child had received up to this point nine units of whole blood and seven units of plasma from the blood bank The blood or plasma was given almost daily, the last bloods being given on Dec 11 and 12 At this time his condition was highly toxic He was in a semiconfused state, restless, had a poor appetite, and slept fitfully Spontaneous motion of his arms was limited The edges of the wounds of the chest were black, with green purulent discharge He had a spiking temperature of 100 to 106 8° F (37 8 to 41 6° C) (Dec 11) He was transfused with 150 ml burned donor blood at night (Dec 14) and with 250 ml the following morning

Condition of child on Dec 15, 11 30 a m—Grandmother who had been with the child daily stated on her own volition, not knowing that he had received any special type of blood, that there had been a crisis Monday morning, Dec 15 He was more interested in his surroundings, he asked about people at home, there was less pain, he slept better, his appetite improved, and he began to have more spontaneous movements While two of the doctors were talking to the grandmother, the nurse came out of the patient's room and signaled to them to enter The patient had just received his second bottle of blood and was "leading the band" on the radio with his arm, he had not been able to move that arm before His temperature was 101° F (38 3° C)

On Dec 16 (noon) he showed no regression, he was alert, he slept frequently, his appetite was good, and oral and fluid intake were considered good There was a certain amount of fatigue His temperature was 101 8° F (38 8° C) From 9 40 to 11 10 that evening he received 250 ml of burned donor plasma

Dec 17—The child was as bright, alert, and aware of surroundings as he had ever been (two doctors' and nurse's impression) His appetite was good, he slept well, and the nurse observed that he perspired for the first time (room was warm) His temperature ranged from 99 8 to 101° F (37 7 to 38 3° C) The wounds seemed to have changed appreciably On Dec 16 the wound edges oozed a greenish purulent material (chest), but on Dec 17 the discharge was more serous and drier and generally healthier looking, this was noted by the doctor and the nurse

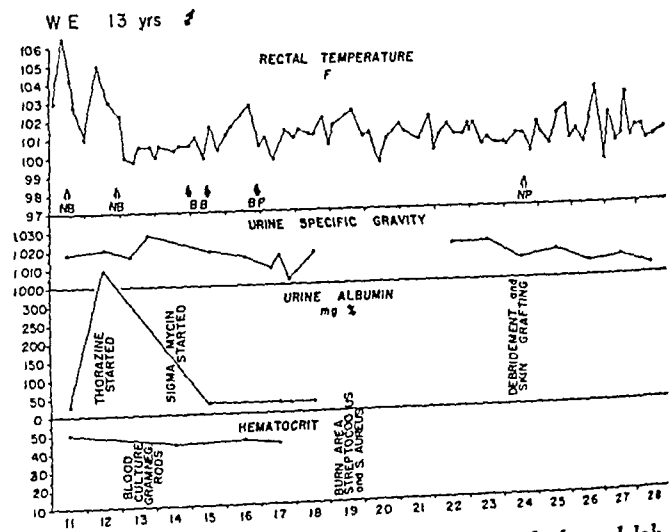

Fig 6 (case 2) —Temperature and selected clinical laboratory determinations *NP*, normal plasma, *BP*, burned donor plasma, *NB*, normal blood, *BB*, burned donor blood, arrow indicates approximate time of administration

Dec 18—Eating and drinking well, moves well, doctors, nurses, and relatives agree that improvement is continuing

In figure 6 is shown how the temperature, which had been spiking from 101 to 106° F (38 3 to 41 1° C), began to fall off on Dec 12 and 13 before

burned-donor blood was given, however, after giving this blood and plasma, this lower level of temperature was maintained The specific gravity of the urine and the urine albumin fell to lower levels after the burned donor transfusions Two new antibiotics were started just before the above transfusions

CASE 3 —Thirteen-year-old female, extent of burn —53%

Condition of child before burned donor transfusions (Dec 16) —Child received almost daily transfusions of a total of 6 units of whole blood and 18 units of plasma up to Dec 12 On Dec 15 she developed signs and symptoms of pneumonia and meningitis, with twitchings, convulsive movements, etc The parents were informed that the child s condition appeared hopeless On Dec 16 she was semicomatose, and respirations were stertorous She responded only to painful stimuli or loud command Her temperature ranged from 101 to 103° F (38 3 to 39 4° C) (rectal) On Dec 16 (8 30 to 10 00 p m) she received 250 ml of burned-donor plasma

Dec 17, 8 50 a m —Relatively quiet, response to command perhaps slightly better than yesterday At 5 45 p m —Nurse and mother both state that child could take solid food (Jello) for the first time and fluids without gagging Less irritable, movements somewhat improved At 10 00 p m —received 250 ml of burned-donor blood

Dec 18, 8 30 a m —Improvement marked Child opened eyes fully for first time and actually focused on held-up fingers and could tell how many fingers were up Speech clearer, respiration clearer and more regular (less rhonci), took fluids and solids without choking Doctors, nurses, and parents enthusiastic—they felt a remarkable change for the better had taken place At 9 15 p m —sleeping naturally, respiration regular and not labored Ate solids well today Temperature—100 to 101 2° F (37 8 to 38 4° C)

Dec 19 and Dec 20—250 ml of burned-donor blood given

Dec 24—Two attending men to the child attested that something akin to a crisis" occurred around the 16th to 19th of December This child, whose condition had been considered hopeless, was now alert and eating and sleeping well, she was well aware of her surroundings and conversed freely

In figure 7 it will be noted that there was a fall in temperature corresponding to the burned-donor blood transfusions The specific gravity of the urine and its albumin content also tended to fall Two new antibiotics and cortisone were started just before the burned-donor blood transfusions Blood cultures were positive before and after the administration of the antibiotics and cortisone

Comment

There are undoubtedly numerous factors which contribute to the toxic and lethal effects following burning The fluid, colloid, and electrolyte loss, nervous, hormonal, nutritional disturbances, and secondary infection are important factors Cognizance of these factors unquestionably has diminished the mortality following thermal injury of moderate severity, but the death rate following severe and extensive burns still remains high [5, 6]

The diffidence of accepting the existence of a burn toxin' rests to a great extent on the inability of many workers to detect the presence of a "toxin" in the blood of burned individuals or animals The usual method for determining the presence or absence of a 'toxin' is to inject the blood or plasma of burned animals into normal ones The results at best have been equivocal Under given conditions, however, the blood of burned animals, when injected into previously burned ones, results in death of the animals [7] It is known that the blood of normal individuals or animals can detoxify many types of toxins This property has been demonstrated for the properdin-complement system [13] and the endotoxin detoxifying component (EDC) of the blood [14] These substances have been shown to detoxify the action of bacteria (gram-negative) or their toxins and certain viruses, but are not known to increase after immunization It is possible that these or other substances normally present in the blood may to a certain extent neutralize the "burn toxin, whereas the reticuloendothelial system may actually remove toxins, bacteria, etc [15]

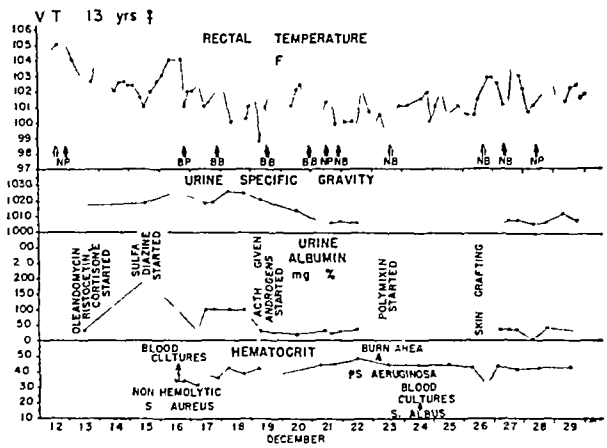

Fig 7 (case 3) —Temperature and selected clinical laboratory determinations *NP*, normal plasma, *BP*, burned donor plasma, *NB*, normal blood, *BB*, burned donor blood, and arrow indicates approximate time of administration

One of us (S R R) and colleagues [9, 10, 21, 22, 23] have been able to isolate a 'toxin directly from diffusates of burned skin of rats *in vivo* circumventing the circulation This 'toxin' is fatal to mice or rats in experiments involving acute or chronic conditions Injection of this toxin" into rabbits produces precipitins to the toxin" and hemoagglutinins and 'hemolysins' to red blood cells of acutely burned rats In preliminary experiments in mice,

this rat-"toxin" rabbit antisera, when incubated with or injected after rat "toxin," detoxifies appreciably the action of the "toxin"

The studies on human beings here reported support the animal work Thus far it has been shown that the serum of burned human subjects is cytotoxic to HeLa cells, cytolytic to injured red blood cells, and that the sera of healed burned human beings have an enhanced capacity to neutralize the cytotoxic effect on HeLa cells in vitro Clinical evidence suggests a similar in vivo effect The latter effect was associated with clinical improvement

From the results here reported and from previous experimental evidence it is postulated that after injury, tissue destruction follows as a result of the injury proper This process in turn releases or activates many enzyme systems that continue the further degradation of the tissue [26] These degradation products enter the blood stream [9 21] and can be toxic or lethal to the host [10 22] They also can act as antigens stimulating autoimmunization in the host [23]

It has been shown in animals by immunologic methods that many types of injury (thermal, radiation, or chemical) produce toxic and lethal degradation products which call forth immune bodies which are similar but not identical [27]

The time of detection of cytotoxic and cytolytic agents in the blood following burning or trauma differed in these studies One or the other of the "toxins" appeared shortly after the injury and remained for varying periods dependent upon the extent of the injury The role of the normally occurring detoxifying agents in the blood, absorption of "toxin" by red cells, reticuloendothelial system, etc, is yet to be determined

Clinical evidence combined with laboratory evidence suggests that sera of healed burned persons may act as an "antitoxin" when injected into acutely and severely burned or injured individuals This form of therapy was first recommended by one of us (S R R) in 1937 and has recently gained support from Russian sources [16 28]

The detection of "antitoxins" in the blood of burned persons here tested was not until 40 days after the injury when healing was well on its way It is likely that antibodies appear sooner but in the presence of an open wound with degradation products continually forming, neutralization of antibodies present in the blood probably occurred and, thus, they escaped detection It is of interest in this regard that in severe burns the catabolic process is known to continue for long periods (30 days or more) as demonstrated by a negative nitrogen phosphorus and potassium balance [29]

"Antitoxins" and/or "antibodies" ("anticytotoxins," "hemolysins," and precipitins) were detected in healed burned donors within five years after burning (categories 4 and 3) The fact that these properties were found in convalescent or sera of healed burns and not in normal sera and were contained almost entirely in the gamma globulin fraction ("anticytotoxins") speaks for true antibody formation

The total effect of the blood of a healed burned donor in acute burns is yet to be determined The clinical results here reported should be considered as preliminary only since the availability of blood was limited, the onset of treatment was delayed (14 to 29 days), laboratory methods had to be developed, etc Clinically there was improvement in the six patients who received the minimal amount of blood or plasma In the three who received more than the minimal amount the improvement often was described as a "crisis" The improvement was characterized by a decrease of pain, irritability, and edema, and an increase in awareness, mobility, appetite, and ability to swallow and sleep It is true that in some instances a new antibiotic was started but they differed in each child and the clinical effect followed within hours after the administration of the healed burn sera The clinical improvement was accompanied by a drop in the body temperature and a decrease in the urinary output of albumin consistent with a decrease in toxicity In some instances a decrease in the specific gravity of the urine was noted which would be expected with receding edema In four of the critically ill patients where blood was available for testing before and after transfusion with blood or plasma from donors with healed burns, an *in vivo* neutralizing effect on HeLa "cytotoxin" present before transfusion was suggested This phenomenon, likewise, paralleled the clinical improvement It is believed that not all sera of burned persons have enhanced detoxifying properties The three tests here presented (HeLa tissue culture, "hemolysins," and precipitins) may serve to "titre" the blood for potency

The contribution of infection to the late mortality in severe and extensive burns is undoubtedly great In one report [17] in which 1,000 burn cases were treated by the most modern methods including antibiotics and chemotherapeutic agents, the mortality rate from septicemia accounted for 55% of all deaths Yet a high percentage of the bacterial strains isolated from the blood were sensitive to one or more antibiotics

One possible explanation for the above discrepancy is that toxins of various origins are known to injure the reticuloendothelial system and render such hosts infinitely more susceptible to injury or infection [18 30] In this study "cytotoxins," "cytolysins," and precipitogens were demonstrated almost immediately or shortly after burning before any serious infection was noted It is believed that the lowered resistance established by the degradation products of the injured tissue makes such individuals highly susceptible to organisms not infrequently present on the skin, in the environment, or

in the nose, pharynx, or hands of personnel ministering to the patients

It is proposed that amelioration of the basic injury caused by the "burn toxins" will be necessary before the host can cope efficiently with bacteria or other noxious agents that invade it On the basis of presently available data, it is believed that one method worthy of further investigation to effect such an amelioration is by the use of healed burned donor sera of known *in vitro* antitoxic potency The clinical protocol for such investigations should include daily transfusions of blood (250 ml) or plasma (125 ml) from healed donors whenever transfusions of blood or plasma normally would be indicated or when toxicity is present

Summary

Evidence for the demonstration of a toxin" in the blood of acutely burned or injured human subjects as determined by three different methods has been presented, they are the cytotoxic effect on HeLa cells, the cytolytic effect on red blood cells of acutely burned individuals, and precipitogens against healed burn sera

The presence of an antitoxic-like substance in the blood of healed burned persons to the "burn toxin" has been demonstrated Three distinct tests for "antitoxin" are presented—neutralization of the cytotoxic effect on HeLa cells, 'hemolysins,' and precipitins

Preliminary clinical evidence suggests a beneficial and detoxifying effect of healed burn blood or plasma in critically burned or injured individuals

More clinical trials are recommended using titred' antisera of known in vitro potency

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The opinions in this communication represent those of the authors and are not to be construed as representing the official position of the United States Navy

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OPIFERQUE —On the seal of The Medical Society of New Jersey appear four Latin words, *opiferque per orbem dicor* A century ago, physicians were well enough educated to be able to read this motto at sight Not only that, but they knew it was a quotation from Ovid and that it meant Throughout the world, I am called the Help Bringer' It was Apollo s description of himself—Apollo, the pre-Aesculapian god of medicine *inventum medicinae meum est, opiferque per orbem dicor, et herbarum subjecta potentia nobis* The art of medicine is my discovery, and I am called Help bringer throughout the world, and the power of all herbs is known to me —From in Editorial in *The Journal of the Medical Society of New Jersey*, August, 1960

JAMA, Oct 22, 1960

Avascular (Aseptic) Bone Necrosis Associated with Systemic Lupus Erythematosus

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Eleven patients in a series of 400 cases of systemic lupus erythematosus developed a new complication of that disease, namely, avascular bone necrosis The femoral head was involved bilaterally in eight patients and unilaterally in one Two patients had bilateral damage to the femoral condyle The average age of onset of bone symptoms was 36 years with a mean of 5 1 years after the appearance of the underlying disease There was no relationship between corticosteroid therapy and the appearance of osseous pain The disease process when once started was insidiously progressive in all cases but one and led eventually, in 8 patients, to destruction of the joint with loss of mobility Although therapy may yield symptomatic relief there was no radiographic evidence of improvement The appearance of bilateral avascular necrosis should suggest systemic lupus erythematosus as a possible etiological factor

ELEVEN adult patients in a series of 400 cases of systemic lupus erythematosus (S L E) had advanced bone necrosis primarily involving both femoral heads Ten of these 11 patients had typical S L E with demonstration of L E cells One had a variant of rheumatoid arthritis with evidence of multisystem disease Eight of the patients have become severely incapacitated by this progressive process Bilateral avascular bone necrosis may be associated with systemic disorders such as sickle-cell anemia, Gaucher's disease, and neoplasms, but no previous cases have been reported with rheumatoid arthritis or systemic lupus erythematosus The aim of this paper is to review briefly the literature on avascular necrosis and to present our 11 cases with a detailed analysis of the course of the illness and the effects of treatment

Review of the Literature

The term aseptic or avascular necrosis usually refers to disease of a large segment of bone, such as a femoral head The usual mechanism is due to death of subchondral bone resulting in osseocartilaginous sequestration with adjacent secondary osteosclerosis The name osteochondritis dissecans has also been employed to refer to small areas of this process, such as disease involving a segment of femoral head or condyle [1]

Cruveilher, in 1825, described these changes in the head of the femur [2] The first comprehensive study was a thesis by Kragelund in 1886 Konig published an independent description in 1887 Since then, a vast and confused literature has appeared due to the use of separate eponyms to describe the process of osteochondritis with necrosis in each joint, although the pathogenesis is probably identical For example, changes in the capital epiphysis of the femur of children (osteochondritis deformans juvenilis) is called Legg–Perthes' disease

The etiology of osteochondritis is unknown Trauma to the joint has been implicated in many cases There is often obliteration of the epiphyseal blood supply for unknown reasons When epiphyseal aseptic necrosis follows a fracture or dislocation, the mechanism of interference with the blood supply is obvious Interference has been reproduced experimentally in the capital femoral epiphysis by ligation of the ligamentum teres and stripping of the femoral-neck periosteum [1]

The initial pathological lesion is considered to be an obliteration of the blood supply of the epiphysis followed by reactive hyperemia which is manifest in the roentgenogram by osteoporosis At this stage, the necrotic bone is roentgenographically demarcated from viable bone because the dead tissue does not take part in the decalcification since it has no blood supply By contrast, the necrotic area appears increased in density compared with the osteoporotic bone around it During the healing stage, as new blood vessels grow in and as bone repair is occurring, the newly formed bone is soft With continued pressure on the surface flattening may occur, as, for example, on the medial and superior aspects of the femoral head in Legg–Perthes' disease These irregularities in the contour of the articular surfaces cause definite and con-

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sistent adaptic changes that manifest later as degenerative arthritis

The most common condition of this group is osteochondritis of the capital femoral epiphysis (Legg–Perthes' disease) which occurs in children between the ages of 4 and 12 Bilateral involvement is rare There is usually complete healing, often with good anatomical restoration of the femoral head, after a period of years The term osteochondritis dissecans refers to the same process involving a small well-circumscribed superficial area The most common lesion involves the median femoral condyle near the intercondylar notch Trauma has been implicated more often in the etiology of this localized form of aseptic necrosis than in the cases with destruction of larger areas of bone, but many patients have no history of such damage

Aseptic necrosis of bone has never been described heretofore in S L E or rheumatoid arthritis, a closely related disorder Short, Bauer, and Reynolds [3] do not mention it in a detailed long-term study of 293 cases of rheumatoid arthritis Soila [4] reviewed the roentgenologic manifestations of adult rheumatoid arthritis involving 3500 patients in Finland and also did not comment on such changes Bilateral femoral head aseptic necrosis is seen in sickle cell anemia where it undoubtedly is due to terminal-vessel thrombosis and occasionally in Gaucher's disease or other neoplasms with infiltration of the tumor [5]

Cruickshank [6] recently reviewed the pathology of the joint and tendon lesions in S L E and found that the features which differentiated this disease from rheumatoid arthritis were a deposition of fibrin like material on the surface of or within synovial tissue associated with loss of synovial cells, the presence of hematoxylin bodies, and an absence of rheumatoid granulomas Other changes which may occur were similar to those found in rheumatoid arthritis No mention was made of avascular necrosis

S L E is a malignant variant of rheumatoid arthritis characterized as a multiple-system disease with, almost invariably, a rheumatoid-like arthritis which does not usually progress to classic rheumatoid deformity At one time or another there is often a history of, or current evidence of, skin eruptions of a discoid or systemic type, pleuritis, pericarditis, Raynaud's phenomenon, nephropathy, hemolytic anemia, leukopenia, and demonstration of L E cells Several reviews have described the differential diagnosis between rheumatoid arthritis and S L E [7] At times, an illness which begins characteristically as one of these ailments may be insidious and, in time, clinically resemble the other The L E cell test is diagnostic of the systemic form of this disorder except for 5% of patients who have rheumatoid arthritis with L E cells Whether this small group will eventually terminate with S L E is not known

Clinical Material

Table 1 summarizes the clinical data concerning the 11 patients Four were men This is interesting because the usual incidence of men with S L E is 12%, whereas the sex ratio in aseptic bone necrosis is about equal The diagnosis of S L E was proved by the finding of L E cells in 10 of the 11 patients The other had rheumatoid-like arthritis with multiple-system disease (case 11) The mean age of onset of symptoms referable to bone necrosis was 36 years, with an average of 5 1 years after the appearance of the underlying disease There was no evidence of preceding trauma, sickle-cell disease, Gaucher's disease, syphilis, active tuberculosis, or neoplasm as an etiological agent in any of the patients Eight patients had bilateral femoral-head involvement and one had unilateral changes Two patients had involvement of both knees

The relationship between the onset of symptoms and corticosteroid therapy was carefully investigated Five patients were on hormonal therapy at the time of onset of their symptoms, and the other six were not Corticoid therapy was discontinued in five patients from many months to several years prior to the onset of symptoms of bone necrosis One person with proved S L E had never received any therapy with steroids until after the hip process had become well established and stabilized (case 3) Six patients subsequently received systemic steroid therapy for the pain which was produced by the aseptic necrosis, symptomatic relief was obtained in two Locally administered hydrocortisone was of benefit in one of three cases in which it was tried Conservative treatment with temporary immobilization and salicylates was effective in four patients Four others were not benefited by treatment with salicylate or steroid therapy One patient had a cobalt-chromium alloy (Vitallium cup) arthroplasty of the hip with good results

In order to ascertain the frequency of asymptomatic aseptic necrosis, routine hip roentgenographic examination was performed on 70 ambulatory patients with proved S L E who had no complaints referable to that joint Only one case of early bone necrosis was found (case 10) Two other patients had severe osteoporosis, and one had intertrochanteric fracture with osteoporosis

Course of the Illness

The characteristic pattern which suggested that aseptic necrosis was present rather than arthralgia or arthritis associated with the underlying disease was a persistent localization of pain on motion to one joint With knee involvement there was initial, unilateral swelling with effusion and no increase in local heat Rest completely relieved the pain, contrary to the usual type of acute arthritic discomfort in S L E or rheumatoid arthritis where the dis-

in the feces, in the lymph and cells of the thoracic duct, and in serum

Transmission—Transmission of attenuated virus from person to person was first demonstrated in studies at an institution for retarded children in California[7] This aspect of the vaccine's action was later reinvestigated by Gelfand and others,[8] and the results indicated that the extent of the virus spread to susceptible persons in contact with vaccinated persons depended on the strain employed, the age of the vaccinated person, and the prevailing social and economic conditions The route of transmission is apparently fecal-oral rather than by way of pharyngeal secretions, but this point is still disputed by some workers In general, one may expect that a certain percentage of susceptible familial contacts may become asymptomatically infected, however, what evidence there is suggests that the attenuated virus is not widely disseminated through a community into which it has been introduced In any case, there is no evidence supporting the contention that immunization of part of a community will eventually bring about immunization of all of the community or the contention that the viruses remain permanently in the community

Stability

Two methods were employed at first to gauge the stability of transmitted viruses One was the measurement of the intraneural pathogenicity of strains isolated from contacts The other was the deliberate serial transfer of virus from one child to another, so as to duplicate artificially, but with proper safeguards, of course, what might happen in nature I have reported in an earlier publication the results of six serial passages in man carried out with the SM strain, and Smorodintsev and co-workers[9] have conducted similar studies with 10 to 12 passages of the LSc ab, P-712, and Leon KP-34 strains These passages failed to show evidence of significantly altered pathogenicity for man or monkey Obviously an enormous number of serial passages have occurred in the course of field trials, yet there has been no evidence of an increase in the number of paralytic cases among the contacts of the vaccinated subjects

Techniques—The differential growth of attenuated and virulent poliovirus es in acid mediums was the first marker employed for characterization of attenuated strains We now possess a whole series of techniques for the more or less precise appreciation of the stability or instability of transmitted strains Differential growth of viruses on stable-line cells and on fresh monkey kidney tissue culture is another genetic marker, but the most practical virus label in use today is the temperature marker, which shows differences in rate of growth of various strains of poliovirus at different temperatures of incubation Another marker under investigation is differential growth of attenuated viruses in a human tissue culture system as compared to monkey tissue[8] The most promising advance in the identification of virus strains is the intratypic serodifferentiation test

Question of Absolute Stability—Since biology is an integrative science, in which Chargaff's dictum that we have to look at both sides of the street at the same time is always applicable, absolute stability of a replicating agent is a contradiction in terms The requirement that a product remain absolutely stable after passing through the alimentary canal can be applied to magnesium sulfate or other chemical laxatives, but not to a self-multiplying agent such as poliovirus We should therefore have clear in our minds what we mean when we apply the term "stability" to poliovirus strains The two essential characteristics are (1) nonpathogenicity for man and (2) immunizing capacity for man We must not forget that the laboratory markers currently available characterize the end-product of attenuation, and not virulence So it is a hazardous presumption to select one or more out of the many possible markers as being a sentinel for either human pathogenicity or immunizing potential Change in these markers can conceivably occur without concomitant change in the two characteristics of paramount importance safety and efficacy

Extraneous Viruses

Protagonists of live virus vaccination often search in vaccine preparations for viruses other than polio and usually find them in the products of their colleagues[11] but not in their own, thus subscribing to the dictum of the fourth Earl of Chesterfield that "most people enjoy the inferiority of their friends" (They often tend to forget Benjamin Franklin's advice "Clean your finger before you point at my spots")

Indeed, as has been shown by Sweet and Hillerman,[12] a simian agent not related to poliovirus has been found in all the lots of vaccine prepared with attenuated strains LSc ab, P-712, and Leon KP-34 and probably will be found in all other lots of vaccine prepared from freshly explanted monkey kidney tissue cultures But this should hardly deter anybody from accepting the product

The idea of disqualifying a live virus vaccine because it contains an extraneous virus not known to be a human pathogen immediately suggests the following considerations 1 Almost every attempt to isolate viral agents that lie dormant in the cells of all living organisms and which can emerge when such cells are cultivated under conditions freeing them from the restraining influence exerted by the organism as a whole will succeed As a self-prepetuating research project it is a good one for the next thousand years 2 Smallpox vaccine has been used successfully for almost 200 years Yet extraneous viral agents could doubtless be found if searched for in calf lymph Do we call a halt to vaccination on this account? 3 Live vaccines prepared from chick em-

bryo tissue could very well contain a chicken cancer virus An agent of this type has presumably been detected in cultures of normal fertile hen's eggs How, therefore, does the question of the injectable 17D vaccine or chick embryo smallpox virus enter into this picture?

The poliomyelitis vaccine is administered orally, and many viruses find their way into the human body through the mouth If one wishes to be a purist in this entire matter, then the licensing authorities should require all food items which are eaten uncooked to be tested for the presence of viral agents

Although it is permissible to be lighthearted about this whole matter of extraneous viruses, one should not at the same time be lightheaded If possible, one should attempt to feed to millions of people throughout the whole world a preparation which would be free—so far as can be demonstrated within the limits of our present knowledge—from any virus other than polio

Several research pathways may be chosen leading to possible solution of this problem 1 Filtration of the existing monkey kidney tissue preparations of attenuated poliomyelitis vaccines after de-ionization through ion-exchange columns at different concentrations of salts should be done with the hope that adsorption rates of simian agents and poliovirus are different and that it would be possible to separate the two groups of viruses It is possible, however, that the results of this approach may be disappointing, if there are simian viruses which have the same rate of adsorption as poliovirus or if other viruses, with physical properties presently unknown, are discovered in future preparations of monkey kidney tissue culture 2 Preparation of attenuated virus vaccines in semi-stable lines originating from normal human embryo should be made Chromosomes of these cell lines display the normal human karyotypes and cells are morphologically identical with normal human cells The presence of a potential human cancer virus cannot, of course, be ruled out because of the unknown nature of such agents, but for the same reason it is not possible to exclude the possibility of a primate cancer virus in fresh monkey kidney tissue culture preparations Although the idea of cultivation of live poliovirus in semi-stable human tissue culture lines has been abhorred up to now, the presence of simian virus may indicate the necessity to reevaluate the whole problem The fact that the vaccine is fed and not injected may make the cancer virus problem more theoretical than practical in importance 3 Preparation should be made of vaccine in fresh explants from tissue such as bovine kidney or chick embryo which are not susceptible to infection with intact poliovirus but are susceptible to infectious polio RNA Since means of increasing the efficiency of the infectivity of polio RNA are now available, the possibility of such a solution to the simian virus problem may be more practical than has been believed in the past Ready availability of such tissues as bovine kidney and chick embryo may counteract the increase in cost of the vaccine which would be caused by use of infectious RNA as inoculum

The particular non-polio viral agents that may have been uncovered from live poliomyelitis vaccine have perhaps undergone more rigorous safety tests than any other biological agent through its extensive use in millions of persons throughout the world If an adequate number of persons exposed to these agents have been shown to develop specific antibodies without any clinical disease, the evidence should be regarded as overwhelmingly in favor of the harmlessness of these agents

Interference

Early in our studies we observed that the simultaneous administration of two types of attenuated virus led to interference between the types These observations indicated that simultaneous immunization with all three types of poliovirus might not be feasible Cox and his associates [13] later reported that

Persistence of Antibodies to Type 2 Poliovirus in Children Given the TN Strain of Type 2 Attenuated Virus

Subject	Virus Dose Given Log 10 MPD_{50}	Virus in Feces Days after Administration	Reciprocal of Neutralizing Antibody Titer Yrs after Vaccination 4-6	8	10
2	5 0	4 9	128	128	256
5	4 0		16	32	16
7	2 1	13	128	64	>1024
8	2.1	9 13	128	64	256
9	2 1	9	256	128	256
13	2 1		256	16	64
14	2 1		32	16	16

the difficulty presented by simultaneous feedings had been overcome by the use of larger doses of virus However, our recent observations and the large-scale observations of Smorodintsev and others support the earlier findings that strains of virus administered simultaneously interfere with each other The phenomenon of interference between strains also foreshadowed one of the problems of immunization with attenuated virus, namely, interference against poliovirus caused by pre-existing infection of the intestinal tract with other enteric viruses Whether the adverse action of interference can be changed into a beneficial one through the use of homotypic attenuated virus during a polio epidemic remains to be seen, although those who would approach such a project with enthusiasm should be warned that the antagonists of live virus vaccination have two pat comments on any outcome of such a trial If the epidemic is substantially abated, the vaccine failed to stop it completely, if the epidemic ends following vaccination, it would have stopped anyway, even without the use of vaccine *Tertium non datur*

Perseverance or Obstinacy—The table, instead of bearing the title "Persistence of Antibodies to Type

2 Poliovirus in Children Given the TN Strain of Type 2 Attenuated Virus," should perhaps be recaptioned with the words written by Laurence Sterne 200 years ago "'Tis known by the name of perseverance in a good cause, and obstinancy in a bad one" The levels of type 2 antibodies in sera of children given the original TN strain in 1950 remained essentially unchanged during 10 years of observation, with the possible exception of subject number 7, whose antibody rise between the 8th and 10th years after administration may have to be attributed to a booster infection It is rather comforting to know that at the end of such a long period of observation the status of immunity after a single oral administration of live attenuated virus may be considered to represent true "perseverance"

Envoi

Finally a parable, which we commend to the attention of the adherents of all schools, live or dead The greatest detective of them all, Sherlock Holmes, was less impressed by the mysterious stranger on the premises than by the failure of the dog to bark in the night Perhaps in "The Case of the Spiked Potion," too, the mysterious agents encountered in our laboratories are less significant than all those healthy children who never complain! As Holmes himself remarked "In solving a problem of this sort, the grand thing is to be able to reason backwards That is a very useful accomplishment, and a very easy one, but people do not practice it much" Reasoning backward from the successful culmination of this first decade of experience with live vaccines, we can, I think, look forward beyond our tin anniversary to years of continuing success and safety, and to anniversaries even more deserving of celebration

36th St at Spruce (4)

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NOTE Because of limited space, the number of references documenting this paper has been reduced to a minimum A full documentation may be found in the Proceedings of the Second International Conference on Live Polio Vaccines, Pan American Sanitary Bureau, Washington, D C, June, 1960

CHARCOT'S LABORATORY—Charcot organized something which then was exceptional a rudimentary laboratory, located at the end of the cancer ward, which he furnished with a few microscopes, and which rapidly became cluttered up with glass jars destined to be used for the conservation of anatomic specimens In this laboratory, even before 1870, Charcot had conducted investigations of fundamental scientific importance on the normal and pathologic anatomy of the nervous system At this time, only a few students had enrolled in Charcot's service, but a distinguished neurologist without any official title, Duchenne de Boulogne, visited him repeatedly—G Guillain J-M Charcot, 1825-1893 His Life—His Work, edited and translated by P Bailey, New York, Paul B Hoeber, Inc 1959

CLINICAL SCIENCE

Serum Enzymes

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AN increasing number of enzymes of intermediary metabolism have been found in serum, and changes in their activities have been correlated with disease processes We shall discuss some of the factors which appear to regulate enzyme activities and indicate the relatively simple biochemical techniques which are currently employed to enhance the specificity and, thereby, the clinical usefulness of serum-enzyme determinations We shall confine ourselves to enzymes with a well-defined place in intermediary metabolism and omit others, such as the alkaline phosphatase, which have a long and established record in clinical practice

Perhaps the most striking property of living matter is its ability to establish and maintain difference in concentration between the cell, extracellular fluid, and subcellular compartments A comparison of enzyme activities between liver and plasma, illustrated in Table 1, shows the magnitude of this difference Changes in plasma concentrations of substrates such as glucose, of electrolytes such as sodium and potassium, and of proteins such as enzymes, reflect changes in distribution between cells and extracellular fluid and also serve as an expression of pathological processes One of the functions of clinical biochemistry is to develop tools whereby these changes can be determined specifically and to achieve greater diagnostic and prognostic importance

TABLE 1 —Concentration Gradient

Enzyme	Liver Serum Activity/Liter of Tissue / Activity/Liter of Serum
Pyruvic kinase	700
Lactic dehydrogenase	3 000
Glutamic oxalacetic transaminase	11 600
Glyceraldehyde phosphate dehydrogenase	24 000

In vitro, tissues lose enzymes readily into the suspending medium This has been shown for ascites tumor cells,[1] for the release of aldolase from apparently intact muscle,[2] and for both liver slices and liver cells Cells prepared from rat liver lose most of their content of at least five enzymes present predominantly, in the cytoplasm, although these cells appear intact to microscopic examination These changes may be modified in the presence of substrates by changes in pH of the suspending medium or by anoxia They cannot, however, be reversed or abolished[3] In vivo, relatively physiological conditions, such as strenuous muscular exercise, may lead to increases in serum-enzyme activities so that alterations in cells short of necrosis can be responsible for significant changes (Table 2)

TABLE 2 —Serum Enzymes Before and After Exercise

Enzyme	(μ Mols/Ml/Hr) Control	After One Hour of Muscular Exercise
Lactic dehydrogenase	5 0	9 0
Malic dehydrogenase	2 9	4 5
Glutamic pyruvic transaminase	0 4	0 5
Glutamic oxalacetic transaminase	0 3	0 6
Aldolase	0 2	0 7
Glutamic dehydrogenase	0	0 2

The cell membrane is, however, not the only barrier which the enzyme may have to traverse before reaching the serum, and, of these, the mitochondrial membrane, apparently capable of maintaining a concentration gradient of about 1,000 for coenzyme I,[4] is one of the most formidable The separation of enzymes into compartments can also be demonstrated by means of stepwise extraction from particulate structures under increasingly aggressive osmotic and mechanical conditions[4] Once in the serum most of the enzymes under discussion are without co enzyme and, therefore, no longer metabolically active

Only minimal amounts of enzyme are excreted in urine[5] and bile[6] Blockage of the reticuloendo-

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thelial system with India ink[7] does not result in increased serum enzyme activity so that sequestration of enzyme in these cells is unlikely to occur to a major extent Changes in plasma volume and extracellular fluid volume may modify the activities of an enzyme measured in serum but are unlikely to determine its ultimate fate The enzymes are, therefore, presumably metabolized as part of the protein pool The plasma disappearance rates of enzymes are essentially unknown, and the available experimental evidence is scanty and contradictory Thus, two different observers injected lactic dehydrogenase (LDH), obtained from the same source, into dogs and found disappearance rates with half-times, calculated from their data, of less than one hour in one instance and several days in the other[8,9]

We have already commented that organs are much richer in enzymes than is extracellular fluid If, therefore, a tissue loses its content of enzyme *rapidly* the pattern of serum enzymes may, at least initially, resemble that of the injured organ This would be expected to occur in myocardial infarction, and that this can be so is seen in Figure 1 One may expect analogous changes in acute viral hepatitis, but, as seen in Figure 2, the pattern is reflected less clearly This may be due to the fact that in viral hepatitis, unlike myocardial infarction, cells are injured at different times and to a variable extent Furthermore, certain enzymes, notably glucose-6-phosphate dehydrogenase (GPDH), hexokinase (HK), and alcohol dehydrogenase (ADH) are increased in liver and serum in acute hepatitis,[10] which suggests that the disease process may itself be a stimulus to enzyme synthesis In more chronic liver disease the variable and unpredictable rate of enzyme catabolism makes it more difficult to establish a clear relationship Under those circumstances the search for an organ-specific enzyme becomes particularly important Glutamic dehydrogenase is present largely, though not exclusively, in liver and is absent from normal serum It is localized in the mitochondria so that its presence in the serum indicates mitochondrial damage

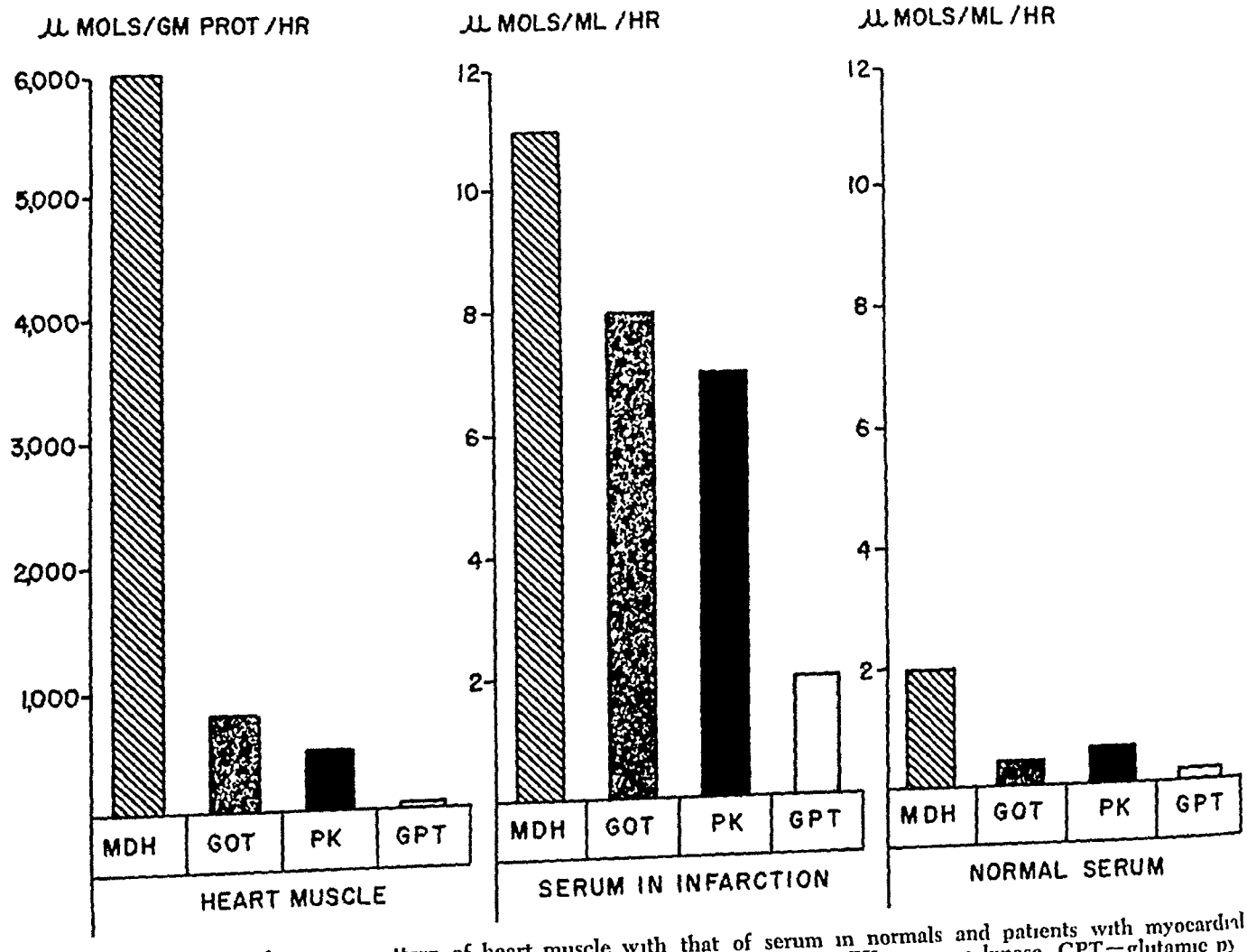

Fig 1 —Comparison of enzyme pattern of heart muscle with that of serum in normals and patients with myocardial infarction MDH=malic dehydrogenase, GOT=glutamic oxalacetic transaminase, PK=pyruvic kinase, GPT=glutamic pyruvic transaminase

In hepatic coma the enzyme pattern is even more bizarre but is frequently characterized by a fall in glutamic oxalacetic transaminase (GOT) and a marked rise in enzymes principally present in muscle and brain such as aldolase (ALD), glyceraldehyde phosphate dehydrogenase (GaPDH) and pyruvic kinase (PK) (Fig 3) Terminally, and for reasons which are not clear, a progressive fall in GOT often occurs with a further steep rise in enzymes arising presumably from muscle and brain

A comparison of enzyme activity in the diseased organ with that in serum may, therefore, suggest determinations which will help to define a given clinical situation more clearly On the other hand batteries of enzyme determinations applied indiscriminately are likely to give less information than would be justified by their cost

Molecules of sodium chloride are the same anywhere in the world Enzymes, however, are not, and this fact is of great potential clinical usefulness It can be demonstrated both electrophoretically and chromatographically LDH and malic dehydrogenase (MDH) have been particularly well studied [11-13] By comparing the electrophoretic behavior of LDH in serum with that of enzyme isolated from various organs, it can be shown that cardiac and renal LDH have greater electrophoretic mobility than hepatic LDH [14] In other words, LDH appearing in serum in myocardial infarction migrates more rapidly than serum LDH in liver disease [15] Again, cardiac LDH is inhibited by sulfite ions whereas liver LDH is not Chromatography of enzymes on diethylaminoethyl cellulose (DEAE) is perhaps a more effective method of achieving separation of enzymes which, while functionally identical, are biologically and electrostatically distinct It has the great advantage of yielding recoveries well over 90% [16] Human heart LDH and LDH from the serum of patients with myocardial infarction is readily retained by such a column at pH 7 2 It is eluted at pH 6 0 by 0 05 M phosphate buffer and 0 1 M sodium chloride and, therefore, appears to be an albumin Human liver LDH and LDH in the serum of patients with viral

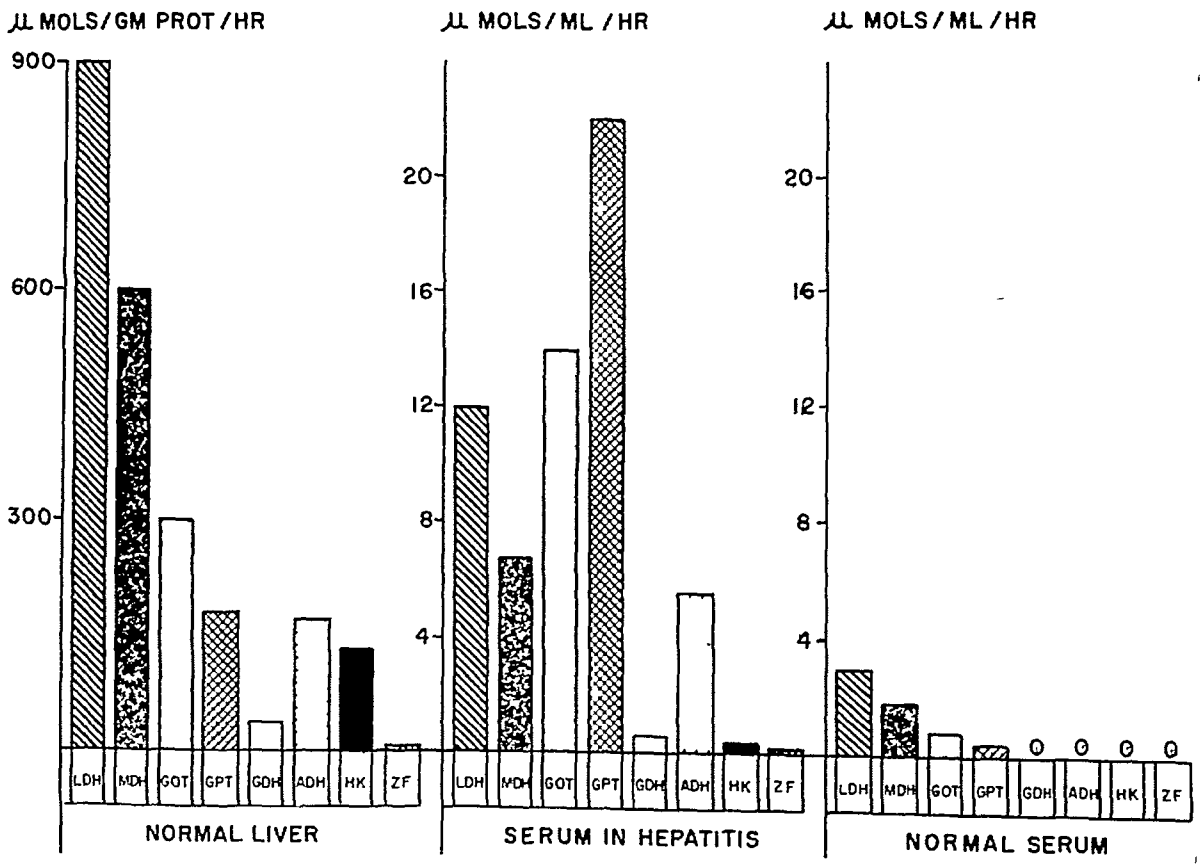

Fig 2 —Serum enzyme pattern in viral hepatitis (normal=25) and normal serum (normal=25) compared with that in normal human liver (normal=23) LDH=lactic dehydrogenase, MDH=malic dehydrogenase, GOT=glutamic oxalacetic transaminase, GPT=glutamic pyruvic transaminase, GDH=glutamic dehydrogenase, ADH=alcohol dehydrogenase, HK=hexokinase, and ZF=glucose 6 phosphate dehydrogenase

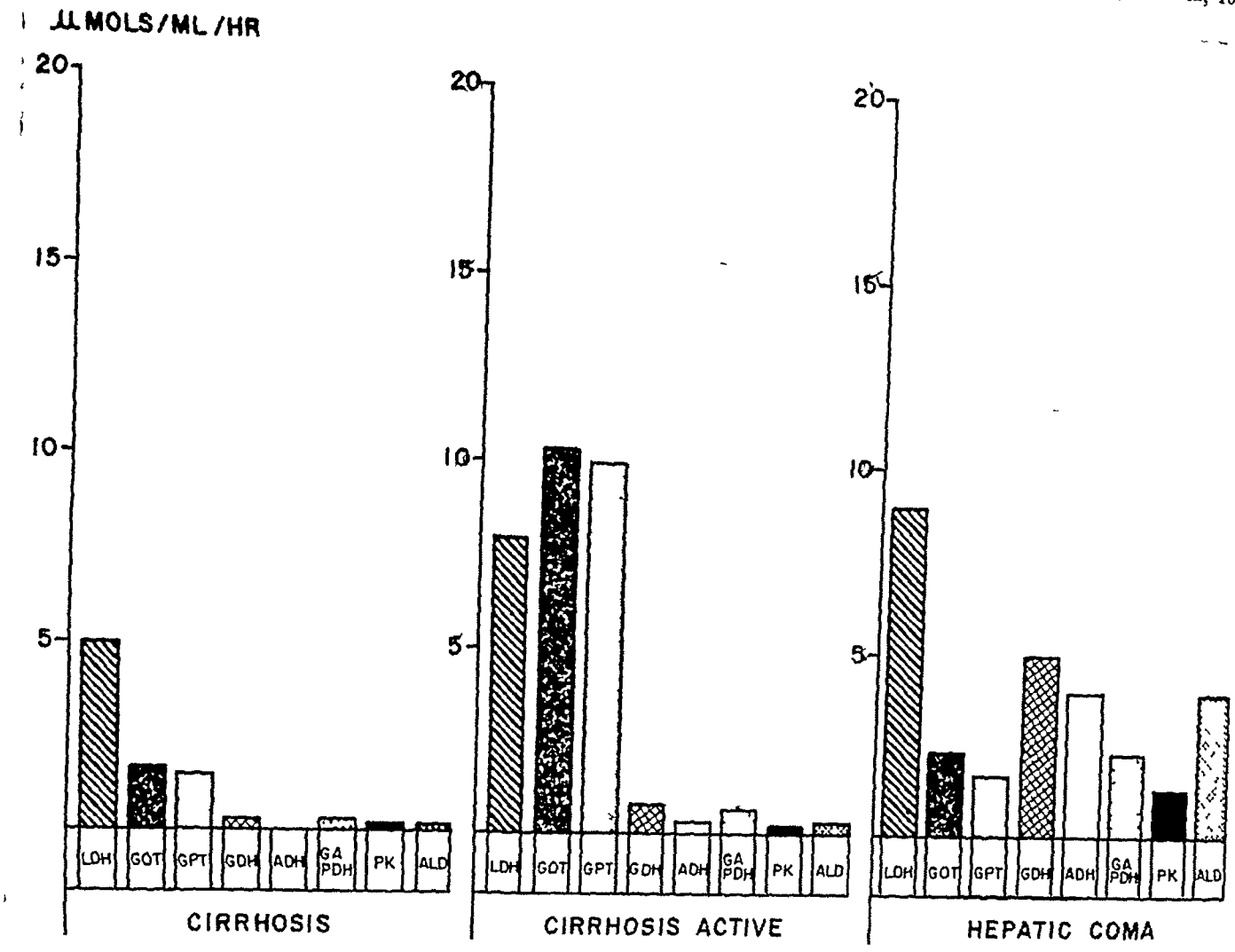

Fig 3 —Serum enzyme pattern in compensated cirrhosis (normal=10), active cirrhosis (normal=11), and hepatic coma Note increase in GaPDH (glyceraldehyde phosphate dehydrogenase), PK (pyruvic kinase), and ALD (aldolase) in hepatic coma, with fall of GOT (glutamic oxalacetic transaminase) LDH=lactic dehydrogenase, GPT=glutamic pyruvic transaminase, GDH=glutamic dehydrogenase, ADH=alcohol dehydrogenase

hepatitis is not retained by the column and behaves electrophoretically and chromatographically like gamma globulin. This technique may not only establish the organ of origin of such an enzyme but has been applied to the separation of two chromatographically distinct species of GOT from dog liver alone, this may possibly differentiate between mitochondrial and cytoplasmic GOT [17]

Quite recently it has been shown that enzymes in serum are probably not carried passively but are themselves subject to metabolic changes These changes may be steps in a process of denaturation which could be expected on biological grounds from the functional inactivity of enzymes in serum The variations in electrostatic charge and variable sulfite inhibition may be an expression of such

TABLE 3 —Optimal Substrate Concentrations in Different Diseases

Enzyme	Substrate	Diagnosis: Acute Hepatitis/Mm	Recent Myocardial Infarct/Mm	Hemolytic Anemia/Mm	Bronchial Carcinoma/Mm
Lactic dehydrogenase	Pyruvate	0 5	0 3	0 5	1 8
Malic dehydrogenase	Oxalacetate	1 7	0 8	1 4	3 7
Glutamic oxalacetic transaminase	Ketoglutarate	4 0	6 0		

Enzyme kinetic data likewise have been used to demonstrate the heterogeneity of a given enzyme in serum A simple way in which this can be done is to find the concentration of substrate which, under given experimental conditions, will give maximal enzyme activity This may vary in different diseases (Table 3)

denaturation Kinetic data support this suggestion Thus, in the case of MDH substrate affinities are much lower when the enzyme is located in tissue than when it is found in serum With increasing chronicity of disease substrate affinities increase This is even more striking in myocardial infarction With each day the amount of oxalacetate required

to give maximum activity to serum MDH increases (Table 4)

Finally, immunological efforts to achieve organ specificity have been made, particularly in the case of alkaline phosphatase [18] and LDH [19] Thus, antiserum prepared against rabbit-muscle LDH will cause 90% inhibition of rabbit-muscle LDH and considerably less inhibition of LDH from other rabbit organs [20] None of the procedures so far described is free from cross reaction which, at present, limits the usefulness of these methods This may itself be a result of the subtle changes which the enzyme undergoes while in serum and which may affect its antigenicity

This account indicates that the field of clinical enzymology encompasses much more than the routine estimations of one or two of these enzymes in the hope of supporting a diagnosis The task is however, hard enough without creating additional difficulties Units are defined in different terms by different investigators and are often dependent on the properties of the optical instrument which happens to be used A microgram, a millimol, and

TABLE 4 —Optimal Substrate Concentration (Malic Dehydrogenase)

Liver Disease	Oxalacetate mM/L
Liver (mitochondrial enzyme)	0 1
Liver (soluble enzyme)	0 4
Serum (hepatitis relapse)	0 4
Serum (acute hepatitis)	1 6
Serum (subacute hepatitis)	2 0
Serum (cirrhosis)	3 5
Myocardial infarction day after	
1	0 8
2	1 4
3	2.3
4	2 5

a millilitre are concepts familiar to every medical student, while a unit with someone s name attached to it is not An attempt at universal agreement on matters of temperature, pH, buffer, substrate concentration, and wave length is overdue Since different authors estimating LDH, for example, use substrate concentrations which vary by a factor of up to five,[20] it is at best meaningless and at worst misleading to compare data from different laboratories If procedures were standardized, comparisons would become possible, repetitive and apparently contradictory work would be avoided, and new information could be obtained more rapidly

This investigation was supported by a grant from the Deutsche Forschungsgemeinschaft and a grant from the National Institutes of Arthritis and Metabolic Diseases, National Institutes of Health, and United States Public Health Service

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THE JOURNAL
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TWO CENTURIES OF NEW JERSEY MEDICINE

THE first "state" medical society in the colonies had its inception at Mr Duff's Tavern in New Brunswick, N J, on July 23, 1766 Seventeen physicians assembled on that day in response to a newspaper notice, "to form a Society for their mutual improvement, the advancement of the profession and promotion of the public good" Dr Robert McKean (1732-1767), clergyman and physician, was elected president of the organization at its first meeting McKean was the first to sign the "Instruments of Associations and Constitutions," as well as "The Tables of Fees and Rates" for medical and surgical charges These references to the professional life and other activities of the pioneer McKean are described in a little volume assembled by Fred B Rogers entitled *Help-Bringers Versatile Physicians of New Jersey*[1] Rogers describes a decisive dozen doctors, each a notable individual and contributor to the essence and events of early times in one of the original thirteen colonies Rogers terminates his historical survey early in this century

In a description of medicine and doctors it is impossible to avoid reference to undergraduate and professional schools which contribute to professional and humanitarian achievements Queen's (Rutgers) College and the College of New Jersey (later Princeton University) were the favored schools for premedical education, while the University of Pennsylvania and the College of Physicians and Surgeons (Columbia University) were the medical schools preferred by this group of 12 Fred B Rogers, born in Trenton, N J, also followed this pattern He attended Princeton University, Temple University, University of Pennsylvania, and Columbia University Why was it necessary to leave the state of New Jersey for medical training? There were several medical schools established during the last century in the state None of these schools survived Traditionally, medical students from "east" Jersey studied in New York City, and those from "west" Jersey in Philadelphia New Jersey now has a medical school, the Seton Hall College of Medicine and Dentistry admitted first-year students in 1956 and graduated its first class in 1960

Dr John Browne (1667-1737), the first physician described in Rogers' book, was a good friend of Benjamin Franklin Browne was born in England, studied at medical centers in England and on the continent, and migrated to colonial New Jersey late in the 1600's The friendship with Franklin is traced to the night that he spent in Browne's Inn near Burlington, N J, in 1723 The Inn remained at Bordentown, N J, until 1950 The death of Browne was announced in the *Pennsylvania Gazette* for May 12-19, 1737

"We hear from Burlington County that on the 11 Inst died there of a Stoppage in his urine, Dr John Browne, a Gentleman of singular Skill in the Profession of Surgery, which he practiced in those Parts many Years with great Success, and was well esteemed by all that knew him"

There is less information remaining of Browne's professional pursuits than of the other physicians included in this volume, who in each instance pursued one or more avocations At various times these New Jersey physicians were identified as preacher, missionary, poet, playwright, lyricist, legislator, governor, librarian, lawyer, numismatist, archeologist, newspaper editor, congressman, poet, confidant of Thomas A Edison, and White House physician Dr Robert McKean, for example, in his lifetime successfully practiced medicine, theology, and pedagogy He was ordained to the priesthood of the Anglican Church in England and returned to New Brunswick, N J in 1757 as a missionary for his church Medicine was perhaps practiced as a side-line to his quest for converts This was not a new concept for a missionary then, nor has this concept been abandoned in contemporary life McKean was buried in the churchyard of his parish at Perth Amboy at the early age of 35

Dr Jonathan Odell (1737-1818), a Tory Satirist, Abraham Coles (1813-1891), Physician-Poet, and Thomas Dunn English (1819-1902), Doctor of Verse, were men of letters as well as medicine *Odell*, an unrelenting Tory, was born in Newark, graduated from the College of New Jersey, served with the British army in the West Indies, and resigned to go to England to enter the ministry He was appointed Deacon at the Chapel Royal of St James's Palace and ordained a priest by the Bishop of London He returned to Burlington, N J, and directed a parish there as well as at St Andrew's Church in nearby Mt Holly Four years later he returned to the practice of medicine, "for which profession I was originally educated" *His Tory* emotions were paramount Because of loyalty to the King, his escapades led to confinement in the environs of Burlington since he was "inimical to American Liberty" Benjamin Franklin was one of Odell's targets

'When it became the high United States
To send their envoys to Versailles' proud gates,
Were no three ministers produc'd at once,
Delicious group—fanatic, deist, dunce?

'And what if Lee, and what if Silas fell,
Or what if Franklin should go down to hell,
Why should we grieve? The land 'tis understood,
Can furnish hundreds equally as good'

(fanatic—Benjamin Franklin, deist—Arthur Lee, dunce—Silas Deane)

Abraham Coles, poet-physician of Newark, was a classicist and translator of hymns He published 18 different versions of the Latin hymn *Dies Irae* (Day of Wrath), composed by an Italian monk in the 13th century Coles was also one of the founders of the Newark Public Library and of the New Jersey Historical Society Thomas Dunn English, a Quaker and lawyer ("I was never lawyer enough to hurt me'), was a regular contributor to *Burton's Gentleman's Magazine* and a one-time friend of Edgar Allan Poe, one of the editors of the magazine English is best known for his sea-song "Ben Bolt," which begins

'Don't you remember sweet Alice, Ben Bolt,
Sweet Alice whose hair was so brown'

This lyric was one of the most popular songs of the past century It was a favorite of soldiers on both sides during the Civil War English was a prolific writer of plays as well as verse, one play was written in the short span of 48 hours Regrettably, his friendship with Poe culminated in a fist-fight in New York City

Other physicians described by Rogers are the following General John Beatty (1749-1826), a pupil of Benjamin Rush who was appointed Commissary General of Prisoners with the rank of Colonel in the Continental Army, Delegate to the Continental Congress in 1784-1785, and Secretary of State of New Jersey, Dr Nicholas Belleville (1753-1831), born in France but persuaded under the influence of Count Casimir Pulaski to come to America as an army surgeon, he later rejected an offer by Dr John Jones to leave practice at Trenton for Philadelphia, and was appointed an examiner of medical candidates for New Jersey in 1812, Clarkesville, N J, was named after Dr Israel Clarke (1759-1837), a witty practitioner, Dr William Augustus Newell (1817-1891), physician to John Quincy Adams and Abraham Lincoln, served three terms in Congress, was Governor of New Jersey, and a prime mover in the establishment of the United States Life-saving Service, now a division of the United States Coast Guard, Dr Ezra Mundy Hunt (1830-1894), a leader in public health, composed a classic communication in 1877 entitled 'How to Study an Epidemic', Dr Cyrus Fogg Brackett (1833-1915) served as Head of the Department of Physics at Princeton University for 35 years and was Chairman of the New Jersey State Board of Health for 20 years, he also founded the School of Electrical Engineering at Princeton and was a consultant to Thomas Alva Edison, and lastly, Dr Henry Leber Coit (1854-1917), first full-time pediatrician in New Jersey and the man responsible for the concept of "certified milk"

A notable group of physicians, the dozen described in Rogers book published this year on the birthday (July 23) of The Medical Society of New Jersey will interest a wide range of readers The title, *Help-Bringers*, comes from a Latin quotation on the seal of The Medical Society of New Jersey, the venerable organization which will celebrate its bicentennial in 1966

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ASEPTIC BONE NECROSIS

The article by Dubois and Cozen in this issue of THE JOURNAL (p 966) describing avascular bone necrosis, a new complication of systemic lupus erythematosus, serves to emphasize how greatly our concepts of the various forms of this disease have changed during the past twelve years since Hargraves described the lupus erythematosus cell test [1] The systemic type of the disease has emerged from a medical rarity to a relatively common disorder

"Discoid' lupus erythematosus has been well known to the dermatologists for over a hundred years With the aid of the L E test and careful clinical evaluation, it has been shown that transition forms occur between the so-called 'localized discoid' form of the disease and the systemic phase Such clinical manifestations in patients with discoid lupus as transitory arthralgia, mild rheumatoid-like arthritis, pleurisy, fever, Raynaud's phenomenon, and adenopathy are common findings Leukopenia, elevated sedimentation rates, and increased serum globulin levels are found in approximately one-half of the cases Approximately 10% of patients with 'discoid' lupus eventually progress and reveal L E cells in the blood The close relationship between these two disorders must now be realized The benign-appearing cutaneous lesion may be a herald of advanced systemic manifestation which can be present at the same time or at a later date, when the skin changes have healed

The frequency of systemic lupus erythematosus which is now often diagnosed in the absence of cutaneous manifestations has increased markedly since the widespread use of the L E test At the Los Angeles County General Hospital, according to Dubois, the incidence of the disease rose fourfold and is one-half as common as leukemia or acute rheumatic fever The clinical picture also has

changed greatly from the pre-1948 classic textbook description of the toxic young girl with a scaly erythematous butterfly eruption who died in a few months due to a complex clinical pattern, the keystone of which was the presence of multisystem disease The majority afflicted are still women However, onset may be delayed until the eighth decade of life The disease is now thought to be characteristically subject to remission and exacerbations Any system may be affected initially and heal, months or years later the same or another area may become involved In one series of patients, a majority suffered from rheumatoid-like arthritis, several of whom exhibited rheumatoid nodules[2] Frequently the arthritis is only a periarticular inflammation or morning stiffness without overt joint changes Later, joint effusion and classic rheumatoid deformities may occur Twenty per cent of patients never reveal cutaneous manifestations Diffuse partial alopecia occurs in 70% A less well known but characteristic manifestation is a tendency for the front hairs to break off from ½ to 2 in from the roots and stand out in unruly fashion It has been shown that about 40% of patients who present the clinical aspects of idiopathic thrombocytopenia purpura eventually develop the clinical findings of systemic lupus erythematosus, sometimes years after splenectomy or steroid therapy has induced a remission

As more cases of systemic lupus erythematosus are discovered and followed up over longer periods of time, newer manifestations of the disease appear Dubois and Cozen describe avascular bone necrosis in 11 patients There was no evidence that these changes were associated with steroid therapy, but were the consequence of the protracted duration of the disease It is speculated that these changes are due to vasculitis of the terminal blood vessels in the bone Diffuse blood vessel disease is a feature of systemic lupus and accounts for many of its bizarre manifestations which resemble polyarteritis, such as peripheral neuritis, myositis, and epilepsy, as well as the most dreaded complication, renal involvement Although the inflammatory manifestations are usually well controlled, the renal complication may not be Insidiously, many patients develop a nephrotic syndrome with eventual renal failure Nitrogen mustard may be of temporary benefit Vasculitis in the central nervous system with marked personality disorders, hemiparesis, and other major changes is another late manifestation which resists treatment

The increase in incidence of systemic lupus erythematosus may be due in part to the advent of antibiotics which, formerly, protected these persons from death due to secondary infection They now survive long enough for the other manifestations to appear Because of its bizarre symptoms, the patients with lupus may appear in any field of medicine presenting with aseptic bone necrosis to the orthopedist or an acute abdomen to the surgeon Diagnosis is confirmed in the majority by a positive L E preparation This test is positive only in systemic lupus erythematosus and in about 5% of patients with typical rheumatoid arthritis who may eventually develop systemic lupus erythematosus The changing pattern of this disorder is another example of the advances in medicine which, by prolonging life, alter the type of disease seen and increase the frequency of chronic illness

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ROENTGENOLOGIC SURVEYS FOR GASTRIC CARCINOMA

It is estimated that 25,000 people die of cancer of the stomach each year in the United States Furthermore, the five-year survival rate of patients with this malady is depressingly low Many factors contribute to these disastrous figures The patient may neglect his symptoms, the consulting physician may underestimate the significance of the symptoms, diagnosis and surgical treatment may be delayed Even if each of these aspects was handled to the maximum advantage of the patient, cancer of the stomach would continue to kill because of its low degree of operability after symptoms have developed Hence, examination of the patient before the appearance of symptoms should have merit Mass examination for gastric cancer in specific age groups has been recommended

In spite of the progress in detection of malignant tumors by gastroscopy, gastric biopsy, and exfoliative cytology, roentgen examination of the stomach is believed by many to be the most practical and reliable procedure for such a survey Various aspects of roentgen examination have been investigated The feasibility of rapid fluoroscopic scanning of the stomach without radiography or with spot-film radiography only has been explored Others omit fluoroscopy and confine the examination to a series of photofluorograms of the barium-filled stomach The results have varied from enthusiasm to recurrence of pessimism

Sherman and Snyder, as described in this issue of THE JOURNAL, page 949, have employed fluoroscopic as well as photofluoroscopic methods to study the problem Mass surveys of the stomach were evaluated and the advantages and disadvantages of the two procedures discussed Twelve tumors were identified in 5,020 fluoroscopic examinations Eleven of these were confirmed at operation, three were malignant These patients are living and well at the last report five years later Photofluorographic examinations were completed on 15,750 patients Tumors were suspected in 48, operations were performed on 17, and 4 malignant tumors were re-

sected The authors stress absence of symptoms among the group examined Fluoroscopic examinations were preferred because they are easier to conduct and promote better patient-physician relationship should the examination require subsequent investigation

Surveys such as described are not without hazard and difficulty Surveys should be repeated frequently, at least once a year and possibly more often to be of value Valuable time of trained specialists is required A negative examination may produce a false sense of security A significant number of complete examinations with conventional methods will be required as a follow-up of such a survey The total expenditure may become prohibitive in time as well as cost Genetic radiation risk plays a minor, although a not completely negligible, role in the age groups to be examined The exposure to the examiner cannot be overlooked Finally, and probably the most important, no survey should be started unless adequate means are incorporated in the survey to provide for follow-up studies and proper treatment of the subject The necessity of convincing persons without symptoms that they may be patients with disease is a formidable stumbling block

Another approach to the problem of early detection of cancer of the stomach is the study of special patient groups which might yield a greater return Such studies have been performed, especially at the University of Minnesota Persons with low gastric acidity or pernicious anemia have yielded a much higher incidence of gastric tumor than non-selected subjects

In spite of the enthusiasm manifested by some proponents of mass surveys for the detection of cancer of the stomach, the balance for or against is undecided Many competent physicians believe that their usefulness has not been established On the other hand, there must be no relaxation of vigilance in searching for a more accurate delineation of 'danger groups' in which the probability yield is great and in which these or more reliable types of examinations may be productive

INFECTION AND IMMUNITY IN CHRONIC LYMPHOCYTIC LEUKEMIA

Shaw and co-workers [1] present a study of the immunologic response of patients with chronic lymphocytic leukemia to bacterial infection In their experience the absolute granulocyte counts, the polymorphonuclear response to infection, and the phagocytic function of the polymorphonuclear cells were found to be normal in these patients However, a decreased or even absent circulating antibody response to antigenic stimulation was observed These findings pointed to a failure of the immunologic response

In a group of 18 patients with chronic lymphocytic leukemia admitted to the Clinical Center at Bethesda, Md, 10 patients, according to Shaw, had multiple bacterial infections and five of these died Hypogammaglobulinemia in this group appeared to be directly related to the incidence and severity of these infections A study of the serum γ-globulin concentrations and circulating antibody production was undertaken with regard to bacterial infection

In a later group of 42 patients with chronic lymphocytic leukemia admitted to the Clinical Center between 1954 and 1959, 36 had γ-globulin determinations made The ability of 24 patients in this group to produce circulating antibodies to four challenge antigens was compared with that of 13 specially selected normal subjects The antigens employed were typhoid vaccine, influenza vaccine, mumps vaccine, and diphtheria vaccine In this group of 42 patients there were 50 major infections, mostly of the respiratory tract, 15 patients died Hypogammaglobulinemia was found in 23 patients (64%), hypergammaglobulinemia in one, and normal γ-globulin in 12 (33%) of the 36 patients Bacterial infections were present in 14 (61%) of the 23 patients with hypogammaglobulinemia and in 4 (33%) of the 12 patients with normal γ-globulin Repeated bacterial infections were more frequent in the 14 patients with hypogammaglobulinemia, who had 32 separate episodes, than in the four patients with normal γ-globulin who had only six episodes These data suggest that hypogammaglobulinemia is a factor in the increased susceptibility to bacterial infections of patients with chronic lymphocytic leukemia

With regard to antibody production it was noted that the 13 normal control subjects showed 44 (85%) of their 52 possible responses, while the leukemic patients responded to only 38 (40%) of their 96 challenges All 13 control subjects responded to at least two antigens, and 12 of the controls responded to three or more Only 11 of the 24 patients had titer increases with two antigens, and only six responded to three or more antigens A definite relationship was found between bacterial infection and ability to produce circulating antibodies The 28 patients, in whom serial γ-globulin determinations were made, demonstrated a trend towards progressive hypogammaglobulinemia No relationship was found between the level of peripheral white blood cell count, hepatosplenomegaly, or degree of marrow infiltration and γ-globulin concentration, antibody production, or isohemagglutinin titers No difference was found between the 10 patients who had received previous antileukemic therapy and the 14 patients who were untreated in terms of γ-globulin, antibody response, or isohemagglutinins

In a group of 61 patients with chronic lymphocytic leukemia Crevssel *et al* [2] found 31 with hypogammaglobulinemia, 25 with normal γ-globulin,

and five with hypergammaglobulinemia Bacterial infections occurred in 74% of the patients with hypogammaglobulinemia but in only 36% of the group with normal γ-globulin

On the basis of both their own observations and data from the literature, Shaw *et al* conclude that in some patients hypogammaglobulinemia may be the first detectable evidence of a lymphoma Failure to produce circulating antibodies appears to be a major defect in host resistance to bacterial infection in chronic lymphocytic leukemia The administration of large doses of γ-globulin, these authors believe, may be of benefit in controlling and preventing bacterial infections in chronic lymphocytic leukemia

G H

1 Shaw, R K, and others Infection and Immunity in Chronic Lymphocytic Leukemia, Arch Intern Med, to be published

2 Creyssel R, and others Deficit en Gamma-Globulines et Complications Infectieuses des Leucemies Lymphoïdes Chroniques Le Sang 29 383 (no 5) 1958

CARCINOMA OF THE THYROID GLAND

Stuart Lindsay, Professor of Pathology at the University of California School of Medicine, has reviewed the clinical and pathological findings of 293 patients with carcinoma of the thyroid observed between 1920 and 1954[1] Although the complete delineation of the natural history of malignant tumors of the thyroid is not possible in this generation because of the multifaceted approach to the treatment of neoplasms, a great mass of data is presented in the monograph Thyroid carcinoma, as defined by Lindsay, is an abnormal proliferating growth of thyroid epithelium, usually locally infiltrating the thyroid glandular parenchyma and eventually extending beyond the thyroid either by direct invasion or by lymphatic and vascular dissemination Localized lesions were classified as malignant when the histological features were similar to or identical with those of neoplasms which possessed obvious invasive or disseminating characteristics

The unequal sex ratio of thyroid malignancies, 3 5 1 in favor of the female, corresponds to the unequal sex ratio of thyrotoxicosis and myxedema On the other hand, there was no evidence that thyroid carcinoma was unusually active or advanced more rapidly in pregnant women than in men or in nonpregnant women The ages of the afflicted varied from the first to the eighth decade, with one peak in the third and another peak in the seventh decade The three histological types in order of incidence were papillary carcinoma, follicular carcinoma, and anaplastic carcinoma

There were two conclusions from the study, conclusions new to me and based only upon perusal previously of pertinent medical literature Most thyroid carcinomas do not originate in preexisting benign nodules or adenomas Cancers may arise in glands with preexisting nodules, but the neoplasms do not usually arise specifically from the benign lesions If a nodule is malignant, the nodule has been malignant from the beginning of nodulation One potent argument in support of this conclusion is the failure of carcinoma of the thyroid to increase in incidence with advancing age, as benign nodules are prone to increase Thus, the prophylactic removal of benign nodules of the thyroid in the hopes that malignancy will be thwarted seems to be a false presumption Also, thyroid cancer is rarely observed in hyperplastic glands of Graves' disease or diffuse toxic goiter The relationship of Hashimoto's disease (struma lymphomatosa or lymphadenoid goiter) to carcinoma of the thyroid has not been defined specifically There appears to be more than chance association between these lesions The incidence of thyroid malignancy in patients with Hashimoto's disease was 20%, whereas the incidence in healthy persons was only 3%

Treatment of carcinoma of the thyroid includes radical surgical excision, local radiotherapy, and radioiodine Surgical therapy has tended to become more radical in most hospitals during the past 10 years, although a few surgeons are not in agreement No significant differences have been shown between percentage of patients with papillary and follicular carcinoma surviving 10 and 20 years after the detectable onset of the malignant lesions There are significant differences, however, in 10- and 20-year survival rates after onset between patients with papillary and anaplastic carcinoma and between patients with follicular and anaplastic carcinoma The accumulative survival rate from onset was about 60% at the end of 30 years, with papillary carcinoma, and only 15% at the end of the 10-year period in anaplastic carcinoma Periods of follow-up of more than 20 years are probably necessary for statistical evaluation of the results of any form of therapy for thyroid carcinoma Such a study might best be the responsibility of several groups of physicians One such group is the American Goiter Association A number of patients have been given thyroid extract postoperatively This procedure was first recommended over 20 years ago, before experimental and clinical data indicated that most thyroid carcinomas were dependent neoplasms which required stimulation by thyrotropic hormone for continued growth Finally, the value of postoperative irradiation of the thyroid gland or use of radioiodine has not been exploited Although carcinoma of the thyroid represents not more than 10% of total thyroidectomies, it is one type of malignancy that should be suspected early in its natural history If it is attacked promptly, the patient has a longer survival time than does the patient with several other types of malignancy

1 Lindsay, S Carcinoma of Thyroid Gland, Springfield Ill Charles C Thomas, Publisher, 1960

THE CLINICAL MEETING

American Medical Association

Washington, D C, Nov 28-Dec 1, 1960

Official Call

To the Officers and Members of the American Medical Association

The Clinical Meeting of the American Medical Association will be held in Washington, D C, Nov 28-Dec 1, 1960

House of Delegates The House of Delegates will convene at 10 00 a m Monday, November 28, in the Sheraton Hall Ballroom of the Sheraton-Park Hotel The representation of the constituent associations in the House for the 1960 Clinical Meeting is as follows

Alabama	2	Montana	1
Alaska	1	Nebraska	2
Arizona	1	Nevada	1
Arkansas	2	New Hampshire	1
California	17	New Jersey	6
Colorado	3	New Mexico	1
Connecticut	3	New York	17
Delaware	1	North Carolina	3
District of Columbia	2	North Dakota	1
Florida	4	Ohio	9
Georgia	3	Oklahoma	2
Hawaii	1	Oregon	2
Idaho	1	Pennsylvania	12
Illinois	11	Puerto Rico	1
Indiana	5	Rhode Island	1
Iowa	3	South Carolina	2
Isthmian Canal Zone	1	South Dakota	1
Kansas	2	Tennessee	3
Kentucky	2	Texas	8
Louisiana	2	Utah	1
Maine	1	Vermont	1
Maryland	3	Virgin Islands	1
Massachusetts	6	Virginia	3
Michigan	7	Washington	3
Minnesota	4	West Virginia	2
Mississippi	2	Wisconsin	4
Missouri	4	Wyoming	1

The scientific sections of the American Medical Association, the Medical Corps of the Army, the Medical Corps of the Navy, the Medical Corps of the Air Force, the Public Health Service, and the Veterans Administration are entitled to one delegate each

Scientific Meetings The Scientific Program will open Monday, November 28, at 9 30 a m in the National Guard Armory and will close Thursday, December 1 at 12 noon

Scientific Exhibits The scientific exhibits will be housed in the National Guard Armory, the exhibits will open at 8 30 a m on Monday, November 28 and will close at noon on Thursday, December 1

Industrial Exhibits The industrial exhibits will be housed in the National Guard Armory, the exhibits will open at 8 30 a m on Monday, November 28 and will close at noon on Thursday, December 1

Registration The Registration Bureau will be located near the main entrance to the National Guard Armory, it will be open as follows

Monday, Nov 28——8 00 a m to 5 30 p m
Tuesday, Nov 29——8 30 a m to 5 30 p m
Wednesday, Nov 30—8 30 a m to 5 30 p m
Thursday, Dec 1——8 30 a m to 12 00 noon

Members (Active, Affiliate, Associate, Service and Honorary) and invited guests may register for attendance at the meetings

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December 1960

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REGISTRATION

REGISTRATION AT THE SHERATON-PARK HOTEL

Registration facilities will be maintained at the Sheraton-Park Hotel for those serving or attending the House of Delegates in their official capacity only The following list details those who may register at the hotel

Medical Society Executives—
Staff members of state, territorial and county medical societies
Editors of state medical journals and county medical society bulletins
Staff members of national organizations of medical interest

Invited Guests
A M A Officials—
Officers and Trustees
Past Presidents
Past Trustees
Past Vice Presidents
Past Editor
Members, Standing Committees of House
Members, Standing Committees of Board

All others should register at the Registration Bureau, located near the main entrance to the National Guard Armory

Registration hours at the Sheraton-Park Hotel will be as follows

Saturday—	2 00 p m to 5 00 p m
Sunday—	8 00 a m to 6 00 p m
Monday—	8 00 a m to 6 00 p m
	(8 00 a m to 10 00 a m Delegates only)
Tuesday—	8 00 a m to 6 00 p m
Wednesday—	8 00 a m to 6 00 p m
Thursday—	8 00 a m to 12 00 noon

It is requested that anyone who is eligible to register at the headquarters hotel do so in order to receive proper badge identification Registration for the Scientific Assembly will be completed at the time your badge is issued and no further registration is necessary Registration booths will be located in the foyer adjacent to the Headquarters Office, leading into the Sheraton–Hall Ballroom where the House of Delegates will meet

GENERAL REGISTRATION AT THE NATIONAL GUARD ARMORY

The General Registration Section will be located in the lobby of the National Guard Armory and will be open during the following hours

Monday—	November 28 8 00 a m to 5 30 p m
Tuesday—	November 29 8 30 a m to 5 30 p m
Wednesday—	November 30 8 30 a m to 5 30 p m
Thursday—	December 1 8 30 a m to 12 00 noon

Delegates
Alternate Delegates
Officers of State and Territorial Medical Societies—
President
President-Elect
Constitutional Secretary

WHO MAY REGISTER

All A M A Members plus residents, interns, Student A M A Members, medical students, registered nurses, and invited guests may register for attendance at meetings

Suggestions That Will Facilitate Registration

Members with Advance Registration Cards can be processed with little or no delay, if the name of your convention hotel or local address and the number of guests you wish to admit are filled in prior to registering Present completed card at window marked "M D Advance Registration" and you will receive a badge and a copy of the Official Program If you do not have an Advance Registration Card and wish us to send one to you, just fill out the form on advertising page 338 and return it before Nov 4, 1960, to the American Medical Association, 535 North Dearborn St, Chicago 10, Ill

Members without Advance Registration Cards will find Physician Registration Cards to fill in on tables near the registration windows The completed card should be presented, together with your American Medical Association Membership pocket card, at the window indicated Your pocket card will be returned and you will receive a badge and a copy of the Official Program

Residents and Interns will find Physician Registration Cards to fill in on tables near the registration windows The completed card should be presented, together with a certification card or letter signed by the Superintendent of their respective hospital at the window indicated

Medical Students and Registered Nurses will be given registration cards at a designated window These should be filled in and presented at the window indicated, together with a card or letter signed by the dean of the medical school they attend or with their professional identification card if the registrant is a nurse

Annual Reports

To expedite the business of the House, these reports have been excerpted so that only those items of interest and concern to the House are transmitted Complete detailed reports are on file in the secretariat of the council or the office of the appropriate Division for any who wish to review them

Report of Board of Trustees

To the Members of the House of Delegates of the American Medical Association

The following annual report of the Board of Trustees is respectfully submitted

From July 1, 1959, to June 30, 1960, the Board held four meetings in addition to those held during the Annual and Clinical Meetings of the Association

The composition of the Board changed during this period, due to the expiration in June, 1960, of the term of Dr Leonard W Larson, who had completed two terms of five years each Dr Gerald D Dorman was elected to succeed Dr Larson as a Trustee Dr Larson, however, by virtue of his election in June as President-Elect, continued as a member of the Board Dr James Z Appel was reelected in June, 1960, for a term of five years

At its organizational meeting, June 16, 1960, the Board elected Dr Julian P Price, Chairman, Dr Hugh H Hussey, Jr, Vice Chairman, Dr James Z Appel, Secretary and Dr Raymond M McKeown, Secretary-Treasurer of the Association Dr Cleon A Nafe serves as the elected member of the Executive Committee of the Board

Annual and Clinical Meetings

Meeting Dates—The following places and dates have been approved for Annual and Clinical Meetings of the Association

Annual Meetings 1961—New York, June 26-30
1962—Chicago, June 11-15
1963—Atlantic City, June 17-21
1964—San Francisco, June 22-26
1965—New York, June 21-25

Clinical Meetings 1961—Denver, Nov 28-Dec 1
1962—Los Angeles, Nov 26-30

General Chairmen—On nomination by the local medical society, the following General Chairmen of the local Committee on Arrangements have been chosen as indicated

Annual Meetings
1961—New York, Dr William L Wheeler
1962—Chicago, Dr Walter C Bornemeier

Clinical Meetings
1961—Denver, Dr William Condon

Scientific Program—In Dallas the House of Delegates changed the date for its opening session from Tuesday to Monday In keeping with this revision, the Scientific Program, including the Scientific Exhibits, at the Washington, D C, Clinical Meeting will also begin on Monday morning, November 28

A M A Affiliations

The American Medical Association continues its membership in the Joint Blood Council, Inc, Joint Commission on Accreditation of Hospitals, Blue Shield Commission, World Medical Association, U S Chamber of Commerce, the National Health Council, and others

In November, 1959, the National Joint Committee for the Improvement of the Care of the Patient composed of representatives of five national organizations recommended to its sponsoring agencies that it be discontinued Termination of this activity was approved, and the following statement to State Commissions for the Improvement of the Care of the Patient was approved for publication in appropriate Association media

"The members of the National Joint Commission for the Improvement of the Care of the Patient, at their meeting Nov 6, 1959, voted to recommend to the boards of the sponsoring agencies that the Commission, as now organized, be discontinued

"The Commission has represented the American Hospital Association, the American Medical Association, the American Nurses' Association, the National League for Nursing, and the National Federation of Licensed Practical Nurses When

the Commission was organized in 1948 there was need for a medium through which to develop better inter-association understanding The Commission has accomplished this in a significant manner This has been a contribution which will have a lasting benefit

"As a result of the understanding engendered, better liaison has been developed between several of the associations There is reason to believe that this liaison will grow and become stronger

From the very beginning it was the hope of the members of the Commission that the working philosophy of the Commission would be picked up in the states and particularly in individual hospitals This has proved to be the case

The commissioners believe that the problems now are of the kind that can best be, and perhaps should be handled within the hospitals or at the state level The pamphlet, Mobilizing Your Personnel Resources for Better Patient Care, outlines steps for the development of sound inter-relationships within a hospital'

Liaison Activities

Liaison committees have been appointed to meet with similar committees of the American Bar Association, American Hospital Association, American Nurses Association, Association of American Medical Colleges, Pharmaceutical Manufacturers Association, American Pharmaceutical Association, National Association of Retail Druggists, American Academy of General Practice, American College of Surgeons, Health Insurance Council, and Conference of Presidents

In accordance with a House of Delegates directive, a liaison committee has been appointed to meet with a similar committee of the American Osteopathic Association One meeting has been held and a report was made to the House of Delegates at its meeting in June, 1960

A M A participation in the interim planning with other organizations for the 1970 White House Conference on Children and Youth was begun in February

The Board of Trustees continues to cooperate with the Nutrition Foundation in selecting the recipient for the Joseph Goldberger Award in Clinical Nutrition which is presented at the Annual Meeting of the Association

Several members of the Board are members of the Medical Advisory Board of the Sears Roebuck Foundation

In order to give physicians an opportunity to obtain an understanding of the law as it affects medical practice, a proposal from the University of Chicago was approved whereby, as a joint project, medicolegal training in the form of a non-credit home study (or correspondence) course would be prepared and presented to physicians and other interested personnel

In April, 1960, the Board nominated Dr Hugh Hussey and Dr John Z Bowers to the Advisory Council of the National Fund for Medical Education

PUBLICATIONS

Scientific Publications Division—Dr John H Talbott was appointed by the Board as Director of the Division of Scientific Publications and Editor of *The Journal of the American Medical Association*

Dr Johnson F Hammond at that time was made Editor Emeritus of THE JOURNAL

Principles for advertising in the scientific publications of the Association were approved, and disseminated to the advertisers for their information and guidance

Policy guides were adopted for the creation, production and distribution of pamphlets and reprints of articles appearing in AMA publications

The Journal—Causes of death will again be included in obituaries published in *The Journal*, except in those instances when, in the opinion of the Editor, such publication is not in the best interests of all concerned

A new design for the cover of *The Journal* became effective with the July 2, 1960, issue It was pointed out that acceptance of the new cover did not indicate a change in the official name of *The Journal*

Specialty Journals—'A M A" was deleted from the titles of the Specialty Jourals, effective with the July 1960, issue

The title of the *Archives of Industrial Health* was changed to *Archives of Environmental Health*, with subtitles to include industrial health, preventive medicine and aerospace medicine

As a general policy with respect to Editorial Boards, the Board voted to adopt the recommendation of the Nominating Committee that changes may be made during the year and that the members of the Editorial Boards be so notified

The title of Assistant Chief Editor was approved for certain individuals on Editorial Boards of the several Specialty Journals

The backlogs of accepted manuscripts in the *Archives of Internal Medicine*, the *Archives of Pathology*, and the *Archives of Dermatology* were handled by increasing the number of pages in those periodicals for a period of three to six months

Today's Health—Advertising standards for *Today's Health*, which eliminate advertising of vitamin and other over-the-counter preparations from the pages of the periodical were adopted A vigorous editorial program in the scientific and other publications of the Association was planned in order to make clear to the profession and the public the attitude of the A M A toward over-the-counter drugs

Standard Nomenclature of Diseases and Operations.—A committee was appointed composed of a representative from the American Hospital Association, the American Association of Record Room Librarians, the Assistant Secretary for Defense and the Department of Health, Education, and Welfare, to be advisory to the Board of Trustees, for a comprehensive study of the Standard Nomenclature of Diseases and Operation

COMMITTEES OF THE BOARD

Appointment—The Board appointed a Commission on the Cost of Medical Care to study pertinent aspects of medical care costs and financing mechanisms In conducting its study, the Commission will consult with purveyors of medical care, representatives of hospitals and other medical facilities, health insurers, and prepayment plans and the cross section of patients Dr Louis M Orr, past President of the American Medical Association, and Dr David B Allman, also past President of the A M A, were appointed by the Board as Chairman and Vice Chairman of the Commission The organizational meeting of this Commission was held in Miami Beach on June 16 The staffing of the Commission has been assigned to the Legal and Socio-Economic Division of the Association

The Board recommended to the House of Delegates that the Council on Medical Education and Hospitals be authorized to create a special committee to

(1) Present a plan for development and administration of a scholarship program, indicating the role of the A M A in the fulfillment of that plan
(2) Ascertain the maximum expansion of the student bodies of the medical schools which could be undertaken without sacrifice in the quality of medical education
(3) Ascertain the identity and location of universities without medical schools but which could provide a suitable educational environment for a medical school as well as an adequate supply of competent students and sufficient clinical material for undergraduate and graduate instruction A full four-year curriculum is desirable, but where this is not feasible, consideration should be given universities which might establish two-year schools and when the environment is proper, plan the ultimate development of a four-year program
(4) To look into problems related to the securing of adequate numbers of competent faculty personnel
(5) Investigate methods of financing the expansion and establishment of medical schools and to develop criteria upon which the mechanisms of financing can be judged
(6) Investigate the financing of medical education with a view toward the most economical operation possible commensurate with high quality medical education
(7) Explore and develop methods of encouraging well-qualified students to undertake the study of medicine
(8) Investigate the possibility of obtaining relaxation of rigid geographic restrictions upon the admission of students to medical schools

This was reported to the House at the Dallas Meeting and adopted

A Nominating Committee was established and an outline of the purposes, composition, procedures, and staffing of that Committee was prepared by the Board

General Principles—The following general principles were adopted by the Board for its Standing Committees and Councils

(1) Standing Committees of the Board shall be designated as Councils only on approval of the House of Delegates, this principle does not, however, preclude the authority of the Board to discontinue any of its Councils at any time
(2) Each Council shall elect annually its own officers The Chairman may not serve more than three consecutive terms, retroactive to Jan 1, 1959
(3) A Council which desires to appoint a Committee shall justify its establishment and shall submit nominations for membership on that committee, including the chairman, for consideration by the Board
(4) In principle, a man should not be a member of more than one Council of the Board
(5) The Board of Trustees shall designate the Chairman of each Standing, Special and ad hoc Committee of the Board
(6) A M A staff personnel shall not be members of the Editorial Boards of A M A Scientific Publications and Councils and Committees of the Association It was understood, however, that this rule did not apply

to ex-officio staff members, without vote, on councils and committees by virtue of the Constitution and Bylaws of the Association

The Committee on Medical Aspects of Sports was designated a standing committee of the Board

The Board of Trustees voted to combine the Committee on Nursing and the Liaison Committee to the American Nurses' Association into one Committee to be known as the Committee for Liaison with National Nursing Organizations A report from this Committee was presented to the House of Delegates at its June, 1960, meeting

Revisions —The Board defined the scope of the Council on National Defense and changed its title to Council on National Security This was reported to the House of Delegates at its meeting in Miami Beach, June, 1960, and approved by the House

The title of the Council on Industrial Health was changed to Council on Occupational Health and the Committee on Aviation Medicine to Committee on Aerospace Medicine

Reports —Reports from several of the ad hoc committees of the Board were submitted at the December, 1959, or June, 1960, meeting of the House of Delegates, i e

Committee to Study the Relationship of Medicine to Allied Health Professions and Services (Dr McKeown, *Chairman*)
(Handbook, June, 1960, pages 38-51)

Committee for Liaison with National Nursing Organizations (Dr Nafe, *Chairman*)
(Supplementary Report D, June, 1960)

Medical Disciplinary Committee
(Supplementary Report N, December, 1959)

Annual reports from other ad hoc committees are submitted as follows

ANNUAL REPORT OF THE AD HOC COMMITTEE ON ATOMIC MEDICINE AND IONIZING RADIATION

The ad hoc Committee on Atomic Medicine and Ionizing Radiation, a committee of the Board of Trustees, was created in May of 1959 The Committee is charged with the responsibility of (1) identifying the broad problems of ionizing radiation as they pertain to health and medical needs, and (2) attempting to list the various areas requiring attention in a suggested order of priority Members of the Committee are Drs Stuart W Lippincott, Chairman, Kimball C Atwood, Marshall Brucer, Brown M Dobyns, Charles L Dunham, Robert R Newell, and Roger A Harvey who succeeded Richard H Chamberlain

To help in fulfilling its assigned responsibility, the Committee sponsored a survey of the following 106 societies in medicine and related areas, the 54 A M A constituent societies, 101 outstanding American scientists, six major branches of the U S Government, and Councils and Committees of the A M A All were invited to provide their opinions in regard to what they considered the outstanding problems in atomic energy and ionizing radiation as these relate to medicine and health

The ad hoc Committee held its second meeting in Chicago in May, 1960 A full day was spent in reviewing and discussing answers to the inquiries discussed above, as well as certain other information which was available A report to the Board of Trustees was discussed and is now in the initial stages of preparation

ANNUAL REPORT OF THE COMMITTEE ON MEDICAL RATING OF PHYSICAL IMPAIRMENT

This report covers the period July 1, 1959, through June 30, 1960 Members of the Committee on Medical Rating of Physical Impairment, a Committee of the Board of Trustees, were Raymond M McKeown, M D, *Chairman*, George F Gsell, M D, Henry H Kessler, M D, Quentin W Mack, M D, and Oscar A Sander, M D Dwight M Palmer, M D, and James V Warren, M D, became members of the Committee in December, 1959

The Commitee on Medical Rating of Physical Impairment met on Sept 29, 1959, at which time Guides to the Evaluation of Permanent Impairment—The Cardiovascular System' was received from the subcommittee which had prepared the Guide It was approved and transmitted to the Board of Trustees, and subsequently was published in the March 5, 1960, issue of *J A M A*, 2,250 reprints of this paper have been distributed

Also furnished upon request were 2,000 reprints of Guides to the Evaluation of Permanent Impairment—Extremities and Back' and 1,700 reprints of "Guides to the Evaluation of Permanent Impairment—The Visual System

The Committee furnished technical advice to the Bureau of Old Age and Survivors Insurance of the Department of Health, Education, and Welfare for its picture, The Disability Decision,'

stituted by Doctor Cutting (Chairman), Doctor Dowling, and Doctor Dragstedt

The Council passed a resolution requesting the U S P Convention to establish a register of nonproprietary names for new drugs similar to that issued by the British Pharmacopoeia Commission and accomplished in such a way that names would be generally available early enough for the Council to use in its original monographs This resolution is under study by the U S P, for the present, the Council continues, as it has in the past, its activities in the adoption of nonproprietary names

New and Projected Activities

The Council has given extensive consideration to increasing the circulation, extending the readership, and improving the format, interest, and quality of its publications The present publication program, although useful to pharmacologists, pharmacists, and other medical specialists, is not extensively utilized by the practicing physician Accordingly, the following changes have been adopted to achieve a wider readership

a) The format of the Council's monographs, as published in *New and Nonofficial Drugs*, will be revised to include a Summary of Council Opinion, providing the casual reader with a thumbnail sketch of the Council's views, and to incorporate additional subheadings and other features designed to increase the attractiveness and readability of the monographs These changes will be implemented in the 1962 edition of the book

b) The Council's column in *The Journal* will be retitled "New Drugs and Developments in Therapeutics," and the format revised to constitute an informal digest of previously adopted complete monograph statements on new drugs Interim mimeographed copies of the complete monographs on which the digest is based will be available upon request

Additional projects being considered are

a) Sponsorship of an annual Therapeutic Number of THE JOURNAL

b) More vigorous promotion, and revision of the scope, of *New and Nonofficial Drugs*

c) Distribution of the Council's annual book to medical students and physicians

Symposium

The Council, in cooperation with the Academy of Medicine of Cleveland and Cuyahoga County Medical Society, the Western Reserve University School of Medicine, the Ohio State Medical Society, and the Ohio Committee on Trauma of the American College of Surgeons, presented a symposium on "The Therapy of Acute Injuries," in Cleveland, on Oct 7, 1959 Papers presented at the symposium were subsequently published in THE JOURNAL

Continuing Activities

Continuing its fundamental program of disseminating authoritative and unbiased information about drugs, the Council initiated during the current annual period evaluation of 62 new drugs and of two new uses of previously evaluated drugs, over 250 authorities in medicine and related sciences were invited to assist in these evaluations by submitting opinions to the Council Evaluations were completed for 57 previously unevaluated drugs and of six new uses of previously evaluated drugs, the Council's conclusions were published in *The Journal of the American Medical Association* in the form of monographs and supplemental statements that will ultimately be included in the annual book publication, *New and Nonofficial Drugs*

The Council sponsored publication in THE JOURNAL of 20 special reports, exclusive of those sponsored by its Committees on Research and Toxicology, including papers on the incidence of bacterial infections subsequent to the introduction of antibacterial agents, specific prophylaxis of tetanus, penicillin and other antibiotics in milk, current status of therapy in burns, cerebral vascular accidents, brucellosis, leprosy, and microbial food poisoning, four papers previously presented at the Council-sponsored Symposium on the Use and Abuse of Adrenal Steroids, and eight papers presented at the Symposium on the Therapy of Acute Injuries

New and Nonofficial Drugs was revised for the 1960 edition to include 45 new drugs and to exclude 21 drugs no longer requiring description or no longer commercially available For the first time the year of commercial introduction of drugs was stated, a new appendix of pharmaceutical manufacturers was added During the year, 106 nonproprietary names for new chemical or biologic agents were adopted The procedure for negotiating nonproprietary drug names was modified and simplified so that the Council's Nomenclature Committee now adopts names on behalf of the Council, whereas formerly the Committee merely submitted recommendations on names for consideration by the Council as a group A statement of the "Current Procedures of the A M A Council on Drugs in the Consideration of Proposed Nonproprietary Names for Drugs" was drawn up and made available to the Committee, cooperating agencies, interested medical societies, pharmaceutical groups, and individuals

The continuing project of examination and coding of solid dosage forms of commercial drugs has been transferred to the supervision of the Council's staff

Respectfully submitted,
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Isaac Starr, M D, Chairman
Windsor C Cutting, M D, Vice Chairman
Christian Wingard, Associate Secretary

COMMITTEE ON RESEARCH

The Committee on Research has held its activities in abevance during the past year, pending a review of its function and objectives by the Council on Drugs, of which it is a Committee

The Subcommittees have continued their activities as follows

1 The Subcommittee on Blood Dyscrasia received 600 new reports at its Registry on Blood Dyscrasias during the past year, distributed the semi-annual summary tabulation to all the members of the American Society of Hematology and the International Society of Hematology in addition to medical societies, medical schools, hospitals, and other collaborating physicians, published a statement of adverse reaction in the April 30, 1960, issue of *The Journal of the American Medical Association*, and invited physicians to forward their adverse reaction information to the Registry in an article in the August 15, 1959, issue of *The Journal of the American Medical Association*

2 The Subcommittee on Breast and Genital Cancer completed the work on the Mammary Cancer Study and its report was published in the March 19, 1960, issue of *The Journal of the American Medical Association* In addition to finalizing this 12-year study, the Subcommittee prepared a compilation of all of the statistical information and protocols for distribution to interested parties in this country and abroad

3 The Subcommittee on Diabetes and Pregnancy Wastage succeeded in enlisting the help of the Departments of Medicine and Obstetrics of the University of Southern California Service at Los Angeles County Hospital for its study of Diabetes and Pregnancy Wastage It became apparent during the year that the study would be more informative if more detailed information were obtained on the newborn infants The Subcommittee consulted a number of pediatricians and subsequently revised the report form so that such information could be obtained As of July 1, 1960, information on 216 cases has been received at the headquarters office

4 The Subcommittee on Grants-in-Aid received 111 applications for financial assistance from research workers Of these 111 requests, 73 applications were awarded the full amount and 38 applications were rejected because the Subcommittee had a limited amount to use for this activity

COMMITTEE ON TOXICOLOGY

The Committee on Toxicology has held its activities in abevance pending a review of its program by the Council on Drugs During the year, the Committees on Toxicology and Pesticides were combined under the single designation Committee on Toxicology"

The Committee on Toxicology sponsored the publication of the following articles "Danger of Suffocation from Plastic Bags," *J A M A* 170 1667 (Aug 1) 1959, and "Occupational Dieldrin Poisoning," *J A M A* 172 2077 (April 30) 1960

Because of the interest in legislation for the labeling of hazardous substances, the Committee prepared the following material for distribution

(1) a booklet entitled Hidden Hazards—the Unlabeled Poison Problem and

(2) a 'First-aid Measures in Poisoning' card

Since the printing of the 'First-aid Measures in Poisoning" card, there have been approximately 9,600 requests for a total of 803,000 cards The cards have been distributed to physicians, medical societies, safety organizations, Boy Scout and Girl Scout organizations, Poison Control Centers, industrial establishments, Chambers of Commerce, 4-H Clubs, Agricultural Extension Service Personnel, manufacturers and sales representatives, newspapers, radio and TV stations, service organizations, church organizations, druggists, and state and local departments of health The booklet and card were sent to persons interested in poison prevention programs and legislation Fifteen thousand copies of the booklet and 495,000 copies of the card have been distributed

COUNCIL ON FOODS AND NUTRITION

New Approaches

Two committees of the Council have been studying new approaches to effective dissemination of current nutrition information to the physician and to the medical student The Nutrition Education Committee, headed by Dr John B Youmans, has recommended more active encouragement of nutrition programs at the state and county medical society level The Committee on Nutrition Teaching in Medical Schools under the chairmanship of Dr Robert L Jackson has been concerned with an analysis of examination results made by the National Board of Examiners in 34 medical schools in 1958 In general, poor records were made in nearly all areas of nutrition The Committee is studying ways and means of improving this situation

Interest has continued in the relationship of diet to coronary heart disease A Council committee headed by Doctor Hand, is preparing a report for physicians on dietary fat and its physiological significance

Hypercholesteremia has been implicated by some as a direct correlative of coronary heart disease To keep the profession informed, the Council sponsored the publication of statements from five investigators on "The Significance of Lowered Cholesterol Levels" (*J A M A* 170 2198-2203 [Aug 29] 1959) Approximately 10,000 reprints were distributed

A Council committee on Gastrointestinal Dietary Therapy is studying the frequently used, but seldom consistent, "bland" or "low residue" diet Because evidence is scanty to justify some of the regimens commonly used in gastrointestinal dietary therapy, the committee is preparing a report that it hopes will stimulate specific research in this area

The Food Additive Amendment to the Federal Food, Drug, and Cosmetics Act which includes the so-called Delaney Amendment has increased interest in food additives, with particular regard to possible carcinogenic agents Realizing that the layman will ask his physician for information and assurance about the safety of food additives, the Council recognizes an added responsibility of the A M A to keep the physician informed It has endorsed a report of a Panel on Food Additives, the President's Science Advisory Committee, May 9, 1960 In general, this report recommends the use of scientific judgment in considering requests to use agents which may be carcinogenic A committee of the Council is preparing a report on food additives

Council-Sponsored Symposia

For the past five years, as part of the Council program in continuing medical education, eight symposia have been presented in different locations in the country, in cooperation with local medical schools and local medical societies Insofar as is possible, the symposia are directed toward the general practitioner Following the symposium, the papers are published in THE JOURNAL and later distributed as monographs The six papers given at a symposium on "Nutritional Problems in Medicine," Nashville, Tenn, May 8, 1959, were published in the April 30, 1960, issue of THE JOURNAL

The seventh Council-sponsored symposium, Infant Nutrition, was held at New York Hospital-Cornell Medical Center, New York, Oct 27, 1959 This symposium was co-sponsored with New York Hospital, the Graduate School of Nutrition of Cornell University, the New York Academy of Medicine and the Medical Society of the County of New York Proceedings of this symposium will have a profound effect upon considerations of the Food and Nutrition Board of the National Research Council in determining recommended dietary allowances for the infant population

On May 19, 1960, a Symposium on Nutrition in Tooth Formation and Dental Caries was held as a part of the Annual Meeting of the Massachusetts Medical Society Co-sponsors with the Council were the Massachusetts Medical Society, the Massachusetts Dental Society and the Harvard School of Dental Medicine

The Council cooperated with the Council on Scientific Assembly in the presentation of the Nutrition Symposium as the first general session of the 1960 Annual Meeting of the A M A in Miami Beach Three Council members, Doctor Goldsmith, Doctor Shank, and Doctor Olson, were among those who participated

Annually, the Board of Trustees of the A M A cooperates with the Council in presenting the Joseph Goldberger Award in Clinical Nutrition This award is sponsored by the Nutrition Foundation, Inc, and consists of $1,000 00 and a plaque It is presented for outstanding research in clinical nutrition Dr Richard W Vilter of the University of Cincinnati received the 1960 award He presented the "Goldberger Lecture" entitled "The Role of the Vitamins in the Etiology and Treatment of Anemia" before the general session of the 1960 Annual Meeting of the A M A

The third annual group of $600 00 fellowships were granted to 10 outstanding medical students for research in clinical nutrition during the nonacademic portion of their junior and senior school year Application for these grants must be made by a faculty member who will supervise the study

Each year these fellowships are given in honor of the previous recipient of the Joseph Goldberger

Award Thus, the fellowships awarded in 1960 were honoring Dr Carl V Moore

The Council also presents current, authoritative information to the physician by sponsoring reports for A M A publications These reports are written upon invitation from the Council and must be approved by each Council member before being submitted for publication During the past year 17 papers have been published covering topics ranging from radioactivity in foods and world food supply to the use of milk in the diets of infants

A part of the Council's effort is directed toward the public The Council believes, however, that the most effective means of nutrition education for the public is through the physician It does encourage its members and staff to serve as consultants or to participate in programs of nutrition education for the public

To encourage good educational advertising, the Council has traditionally offered to evaluate educational materials for trade associations, such as the American Meat Institute and the Wheat Flour Institute If nutritional statements are accurate, the Council permits each item to carry the statement, The nutritional statements presented have been reviewed by the Council on Foods and Nutrition of the American Medical Association and are considered to be in keeping with current authoritative medical opinion'

Organization

The Council met in New York City, in October, 1959, and in Miami Beach in June, 1960 Dr William J Darby and Dr Robert L Jackson were elected Chairman and Vice-Chairman respectively Doctor Shank and Doctor Hegsted are new members of the Council

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ROBERT E SHANK, M D
ROBERT L JACKSON, M D, Vice Chairman
WILLIAM J DARBY, M D, Chairman
P L WHITE, Ph D, Secretary

COUNCIL ON LEGISLATIVE ACTIVITIES

This report covers the period from Sept 15, 1959, to Sept 2, 1960 The period of the report has been extended beyond July 1 in order to cover the activities of the Second Session of the 86th Congress, which recessed on Sept 1, 1960

During the period covered by this report, the Council met on five occasions on Oct 1, 1959, in St Louis, Mo, on Jan 23, 1960, in Washington, D C, on March 25-26, 1960, in Washington, D C on April 29, 1960, in Washington, D C, and on June 13, 1960, in Miami Beach, Fla

Legislative and Political Conferences

On Oct 2-3, 1959, the Council on Legislative Activities sponsored a Medical Legislative Conference in St Louis, Mo, for representatives of state medical associations The purpose of this two-day Conference was to review the status of H R 4700, 86th Congress, the Forand Bill, and to formulate plans at the national and local levels to combat this and similar legislation The Conference emphasized what had been and what could be done by physicians, both individually and collectively, to meet the health care problems of the aged

Regional workshops were held by the Field Service Division and the Communications Division to give the participants ideas and tools with which to work when they returned home Each association was encouraged to hold similar conferences at the state, county, and community level to implement really effective programs in legislative and political affairs

A total of 240 persons attended the Conference Forty-nine state medical associations and the District of Columbia were represented as well as the Woman's Auxiliary to the American Medical Association Guest speakers at the meeting included Robert E Smylie, Governor of Idaho, Congressman Dale Alford, M D, Arkansas, and Congressman Thomas B Curtis, Missouri

The Council on Legislative Activities sponsored Regional Political Action Conferences in Salt Lake City, Utah, on July 29-30, in French Lick, Ind, on August 12-13, and in Hershey, Pa, on August 26-27

The purpose of these conferences was to present practical guides and instructions for medical political organization and action at the local and state levels, to review the actions of the 86th Congress with respect to health proposals, to review the legal aspects of political activity and to present the experiences of certain state and local medical groups which have been active politically in recent years

Each state medical association was asked to send representatives to one of these meetings Every state medical association was represented at one of the conferences with the exception of Alaska, Arkansas, District of Columbia, Hawaii, Mississippi, Missouri, New Hampshire, and Texas In addition, the Woman's Auxiliary to the American Medical

Association and the following allied medical organizations were represented at the conferences American Dental Association, American Nursing Home Association, American Veterinary Medical Association, American Pharmaceutical Association, American Academy of General Practice, Pharmaceutical Manufacturers Association, American Nurses' Association, and American College of Apothecaries

A total of 103 persons attended the conference in Salt Lake City, Utah, 120 in French Lick, Ind, and 115 in Hershey, Pa Each participant received a kit of material on political action covering such subjects as "ABC of Politics," "Practical Politics," "Review of Federal Statutes and Court Decisions Relating to Political Activities of Medical Associations and Individual Physicians," "Election Law Guidebook, 1960," a bibliography of related publications and sample campaign material

Second Session, 86th Congress

During the Second Session of the 86th Congress, which began on Jan 6, 1960, and ended Sept 1, 1960, a total of 6,327 bills were introduced More than 450 bills were subject to serious study and 255 were analyzed for consideration by the Council on Legislative Activities

The following nine bills were signed into law by the President during the Second Session of the 86th Congress

Bill Number	Subject	Public Law Number
H R 7965	—Out-Patient Care in V A Hospitals to Veterans with Certain Non-Service Connected Disabilities	P L 86-639
H R 7966	—Optometric Service on an Out-Patient Basis for Veterans	P L 86-589
H R 8238	—Two Year Study of Air Pollution from Auto Exhaust	P L 86-493
H R 9660	—Medical Expense Tax Deductions for Aged Dependent Parents	P L 86-470
H R 11390	—HEW Appropriations for Research Grants	P L 86-703
S J Res 41	—International Health Research Act	P L 86-610
S 1283	—Hazardous Substances Labeling Act	P L 86-613
S 1806	—Transportation of Radioactive Material and Etiologic Agents	P L 86-710
S 2331	—Hospitalization of American Nationals adjudged Insane Abroad	P L 86-571

In addition, H Res 431 was enacted as an official expression that it is the sense of Congress that the President should call a White House Conference on Narcotics patterned after previous White House Conferences

At the time this report was prepared, the following six measures, passed by the Congress, were awaiting Presidential signature

Bill Number	Subject
S 2575	—Retired Federal Employees Health Insurance
H R 6871	—Public Health Training Program
H R 10341	—Institutional Research Grants
H R 12574	—Longshoremen's Compensation Act Amendment
H R 12580	—Social Security Amendments of 1960
H J Res 784	—Construction of Intern and Nurses Housing

During the Second Session of the 86th Congress more than 25,000 pages of the *Congressional Record* were studied and indexed and over 8,500 pages of the *Federal Register* were scanned for items of interest

Testimony and Written Statements Presented

During the period of this report, the American Medical Association testified or submitted written statements as shown below

Date	Subject	Presentation
Nov 10, 1959	Disability Provisions of Title II of the Social Security Act	Testimony
Nov 13, 1959	General Revision of the Internal Revenue Code	Statement
Jan 25, 1960	*H R 2412*—Spanish American War, Philippine Insurrection, Boxer Rebellion, Veterans Hospital Care Without Regard to Service-Connection	Statement
Jan 27, 1960	*S 1283*—Hazardous Substances Labeling Act	Statement
Jan 28, 1960	*H R 7966*—Out-Patient Optometric Care for Veterans	Statement
Jan 28, 1960	Aviation Safety	Statement
Jan 31, 1960	Federal Appropriations for Medical Research and Medical Facilities and Education	Testimony
Feb 5, 1960	Administration of Social Security Disability Program	Statement
March 14, 1960	*H R 5260*—Hazardous Substances Labeling Act	Testimony
April 1, 1960	Compulsory Coverage of Physicians Under Title II of the Social Security Act	Statement
April 4, 1960	*H R 7966*—Out-Patient Optometric Care for Veterans	Statement
April 4, 1960	Problems of the Aged and Aging (McNamara Committee)	Testimony
April 13, 1960	*H R 8127 and S 2331*—Hospitalization of American Nationals Adjudged Insane Abroad	Statement
May 12, 1960	Treasury Alternative to *H R 10*—Provision for the Inclusion of Employees in Retirement Programs Established by or for the Self-Employed	Wire

May 25, 1960	*H R 11390*—Modification of 15% Limitation for Overhead Expenses for Research Grants	Statement
May 25, 1960	Radiation Protection Criteria and Standards	Statement
May 26, 1960	*S Res 67*—Study Re Utilization of Reserve Components of the Armed Forces in Carrying Out the Civil Defense Program	Statement
June 6, 1960	*H R 6906 & others*—Construction of Teaching-Research Medical Facilities	Statement
June 15, 1960	Aviation Safety	Wire
June 16, 1960	*H R 10341*—Grants to Institutions for Improving Research and Research Training Activities	Statement
June 20, 1960	*S 2575*—Retired Federal Employees Health Benefits Act	Statement
June 20 and 22, 1960	*H R 11390*—Modification of 15% Limitation for Overhead Expenses for Research Grants	Statement
June 23, 1960	*H R 1341*—Safety Devices on All Motor Vehicles Purchased or Leased for Use by the Federal Government	Statement
June 30, 1960	*H R 12580*—Social Security Amendments of 1960—Title VI	Testimony
June 30 1960	*H R 12580*—Coverage of Physicians	Statement

Legislation of Special Interest

Although all of the bills on which testimony or statements were presented are important, several measures are of more current interest and significance to the medical profession

H R 4700—the "Forand Bill"—At the beginning of the Second Session of the 86th Congress, the most important pending legislation of medical interest was H R 4700, 86th Congress This measure proposed an amendment to the Social Security Act so as to provide hospital, surgical, dental, and nursing home benefits for the more than 12 million beneficiaries of the Old Age, Survivors and Disability Insurance Program It was strenuously opposed at all levels of organized medicine and by the majority of other groups in the health field

This measure and several alternatives were subject to hearings before the House Ways and Means Committee during the early months of the Second Session On June 3, 1960, the Committee tentatively approved a bill which called for a federal-state matching health care plan of assistance for persons 65 years of age or over who are medically indigent This bill, H R 12580, 86th Congress, was favorably reported by the House Ways and Means Committee on June 13, 1960

H R 12580—the "Mills Bill"—This measure, as reported by the House Ways and Means Committee on June 13 1960, would have amended the Social Security Act in four areas (1) by providing medical care for the "medically indigent" aged, (2) by authorizing an incentive program to the states for improvement of their public assistance program, (3) through the liberalization of the requirements for disability benefits, and (4) by extending compulsory coverage under Title II of the Social Security Act to self-employed physicians

The following time table indicates the action of the House and Senate on this measure and proposed amendments

June 13, 1960	—The House Ways and Means Committee favorably reported H R 12580 86th Congress
June 23, 1960	—The bill passed the House of Representatives by a vote of 380 to 23
June 29 30, 1960	—Hearings were held on H R 12580 by the Senate Finance Committee The A M A testified on June 30th
July 3, 1960	—Both Houses of Congress recessed until after the Democratic and Republican National Conventions At that time, 27 amendments to H R 12580 had been introduced in the Senate
Aug 8, 1960	—Senate reconvened
Aug 13, 1960	—Senate Finance Committee approved a slightly modified version of the Mills Bill (the Kerr-Frear amendment and others)
	The Committee rejected the Gore amendment by a vote of 12 to 4
	The McNamara amendment was rejected by the Committee by a vote of 12 to 5
	In a key-vote the Committee voted to reject the Anderson proposal by a vote of 12 to 5
Aug 15, 1960	—The House reconvened
Aug 20, 1960	—The amended version of the Mills Bill was reported to the Senate and the Senate Finance Committee amendments were adopted as original text Some amendments were introduced on the floor
Aug 23 1960	—Senate rejected the Javits amendment by a vote of 67 to 28
	Senate rejected the Anderson-Kennedy amendment by a vote of 51 to 44
	Senate adopted several amendments, the Long amendment was the only amendment of medical interest however
	Senate voted 91 to 2 for the passage of H R 12580, 86th Congress as amended by the Senate Finance Committee and as amended on the floor of the Senate
Aug 25, 1960	—Senate-House conferees resolved differences between House and Senate versions
Aug 26 1960	—House accepted the report of the Conference Committee by a vote of 368 to 17
Aug 29, 1960	—Senate accepted the report of the Conference Committee by a vote of 73 to 12

The Council feels that the defeat of Forand-type legislation and the adoption of a measure providing health care for the "medically indigent aged" was a real victory for the medical profession and

for the public as a whole It also feels that this action was ample evidence of the really effective teamwork of American medicine at all levels

S 1283—**Hazardous Substances Labeling Act**—This bill established criteria for the labeling of hazardous substances The term "hazardous substance" is defined as any substance or mixture of substances which is toxic, corrosive, an irritant, a strong sensitizer, flammable, or which generates pressure through decomposition, heat or other means if such substance or mixture of substances may cause substantial personal injury or illness during any customary or reasonably anticipated handling or use, including reasonably foreseeable ingestion by children The bill also included substances which the Secretary of Health, Education, and Welfare finds by regulation to fall into one of the above catagories, and radioactive materials

Hearings were held by the Senate Interstate and Foreign Commerce Committee on Aug 13, 1959 The American Medical Association submitted a statement approving the measure in principle and recommending several modifications When hearings were held by the House Interstate and Foreign Commerce Committee, the Association testified in support of the bill and again presented several suggestions for the improvement of the measure This bill passed both Houses and was signed into law by the President on July 12, 1960

S 2575—**Retired Federal Employees Health Insurance.**—This bill authorized the Civil Service Commission to establish a voluntary contributory health insurance program for federal employees who retired prior to July 1, 1960 This basic idea, i e, to make the provisions of the federal government employees health insurance program retroactive, was embodied in the American Medical Association's statement to the House Committee on S 2162 The Senate and the House of Representatives passed the measure and it has been cleared for the President's signature

Related Legislative Activities

Also, concurrently, during this Second Session, hearings were held by the "McNamara Committee" or the subcommittee on Problems of the Aged and Aging of the Senate Labor and Public Welfare Committee Although it was the alleged purpose of this subcommittee to study all the problems of the aged, there is no doubt that the major portion of the committee's time was devoted to a study of the real or imagined health problems of the aged The committee held hearings in Detroit, Grand Rapids, Boston, Pittsburgh, San Francisco, Miami, and Charleston, West Virginia Representatives of the American Medical Association testified three times before the McNamara Committee—most recently on April 4, 1960

The AFL-CIO's Committee on Political Education issued and widely distributed a "political memorandum," entitled "The Forand Bill and the Record of the A M A" This document charged the American Medical Association with being a leader "in the parade of reactionary forces marching against the passage of the Forand Bill" Then, in an effort to support that charge, the memorandum listed 16 allegations as the American Medical Association's record of opposition to constructive health measures The allegations contained in the memorandum consist of deliberate distortions or perversions of the truth, and outright untruths

The American Medical Association answered these charges by carefully documenting its position on each of the subjects involved On March 15, 1960, Dr Louis M Orr, President of the American Medical Association, demanded a full retraction of the AFL-CIO accusations and an apology from those who made them Needless to say, neither was forthcoming In fact, on April 7, 1960, George Meany, President of the AFL-CIO, sent a letter to all senators and congressmen in which he charged that "The American Medical Association as an organization has consistently set its face against any number of broad public programs designed to improve the health of the nation as a whole, and of the less fortunate in particular" The citations and allegations in this most recent letter are no more accurate than those in the first document and are again falsehoods and distortions of fact

Publications

During the period of this report, 17 issues of the *Medical Legislative Digest* were published and sent to approximately 3,200 persons This publication, which is prepared by the Council on Legislative Activities, is published twice a month while Congress is in session and sporadically when it is not It supplements current legislative news published in the *AMA NEWS* Association testimony or statements presented to Congress were distributed as attachments to this publication

On May 27, 1960, a weekly newsletter entitled *Legislative Roundup* was initiated by the Council on Legislative Activities This publication highlights the week's legislative news and is distributed weekly to approximately 500 persons

Woman's Auxiliary to the American Medical Association

The Woman's Auxiliary to the American Medical Association has continued its close cooperation with the Council on Legislative Activities through its Legislative Committee The Chairman of the Legislative Committee of the Auxiliary continued to attend the meetings of the Council under a policy instituted in February, 1957, and has par-

ticipated in the special conferences sponsored by the Council In addition, the Woman's Auxiliary has responded, with complete cooperation and in a most effective manner, in times of emergency when legislative action was requested

Conclusion

In closing its report, the Council on Legislative Activities wishes to express its appreciation to the Board of Trustees, the Woman's Auxiliary, the officers and staff of the Association, the Field Service Division, and the Washington Office, as well as to the state medical societies, for their cooperation and assistance during the period covered by this report We particularly wish to acknowledge the significant contribution of the State Legislative Keymen and the executive staff and physicians in all the states who took part in Federal legislative matters during this period

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GEORGE M FISTER, M D, Chairman
MR C JOSEPH SPETLER, Secretary

COUNCIL ON MENTAL HEALTH

The Council, during the past year, met in October, 1959, February, 1960, and June, 1960 The Executive Committee of the Council met on March 11, 1960 The Executive Committee also met twice with the A M A Committee on the Relationships of Medicine with Allied Health Professions and Services, in February, 1960, and April, 1960, to discuss the problem of the clinical psychologists as it relates to licensing, certification, and the practice of medicine The Planning Committee met in May, 1960

The Council's deliberations were concerned with medical use of hypnosis, intensifying efforts to introduce more teaching of psychiatry in medical education, both at the pregraduate and postgraduate levels, introducing further use of psychiatry in the field of geriatrics (particularly in the general practitioner area), establishing a committee (probably jointly with the Council on Drugs) to study and provide up-to-date information on psychopharmacology, intensifying efforts to further coordinate the work of Committees on Mental Health of the State Medical Association, making an intensive study and recommendations for the better handling of mental retardation and convulsive disorders, making intensive studies in cooperation with the law division of the many facets of medicolegal problems in the field of psychiatry and studying and promoting future programs pertaining to Mental Health for the consideration of the Women's Auxiliary of the American Medical Association

Committee on Alcoholism

The Committee met in August, 1959 The Committee has prepared a brochure of uniform terminology and definitions in the field of alcoholism to be included in their Manual on Alcoholism The Committee collaborated with the Association's Department of Standard Nomenclature of Diseases and Operations on this project

The Committee also developed a new exhibit on alcoholism in collaboration with the Media Relations Department of the Communications Division The exhibit will be used primarily by the Association, state and county societies and interested medical groups

The Committee continues to maintain at department headquarters the "Classified Abstract Archive of the Alcohol Literature" which is a physician's guide to literature dealing with the problems of alcoholism The headquarter's staff answers the many requests for detailed information found in this guide

Committee on Hypnosis

The Committee met twice during the year in November, 1959, and May, 1960 The Committee has developed a report (approved by the Council) on training in medical hypnosis for the purpose of providing an adequate curriculum for the teaching of hypnosis at medical schools and postgraduate levels The contents of the report have been reviewed by the Council on Medical Education and Hospitals and it has suggested a list of medical school personnel to whom this report could be sent

The Committee also sponsored a symposium on hypnosis in May, 1960, in Atlantic City during the American Psychiatric Association's meeting Approximately 38 psychiatrists and professors of psychiatry representing many medical schools throughout the United States attended The prime purpose of the symposium was to discuss the best methods of introducing training in hypnosis at both the pregraduate and postgraduate levels, in universities, medical schools, and hospitals, in accordance with the information contained in the Committee's training report

In general, the participants at the symposium agreed with the contents of the Committee's report and many of the medical school representatives present agreed to try to set up pilot teaching programs in hypnosis within their school curriculums and report the results at the next symposium on hypnosis which is to be held in Chicago in 1961

Committee on Narcotic Addiction

Because of the absence of Dr Harris Isbell, Chairman, who has been in Europe for the past year on a research project, the Committee held no meeting Plans were made to meet as soon as possible in the fall of 1960

Sixth Annual Conference of Mental Health Representatives of State Medical Associations

Approximately 175 persons attended the Sixth Annual Conference of Mental Health Representatives of State Medical Associations held on November 20 and 21 at the Drake Hotel in Chicago

Forty-one chairmen of the state medical associations committees on mental health and 36 commissioners of mental health of the various states were present The rest of the participants represented outside organizations interested in the problems of mental illness and health, special guests invited by the Council members for their capabilities as experts in the field, and A M A staff members representing most of the divisions of the A M A The over-all theme of the conference was, "Organized Medicine In Its Relationship to the Hospitalized Psychiatric Patient" This theme was divided into six subtopics for discussion by the conference participants They were (1) In the State Hospitals and Other Public Mental Hospitals Area, (2) In the Private Mental Hospitals Area, (3) In the General Hospitals Area (Psychiatric Services in General Hospitals), (4) In the Out-Patient Psychiatric Clinics Area, (5) General Rehabilitation Services Area, and (6) Area of Medicolegal Aspects of Commitment, Discharge, and Other Court Procedures Relating to the Mentally Ill

Assigned to each one of these discussion panels was a chairman selected from among the Council membership, and a recorder-reporter appointed from the mental health representatives of the various state medical societies present

Joint Commission on Mental Illness and Health, Inc

As reported in the last annual report the Commission closed its headquarters doors in Cambridge, Mass, in June, 1959 A skeleton staff was maintained to complete the editing and publication of some nine Joint Commission Monographs as well as a final report which should be ready sometime in late 1960 or early 1961 The Commission's "Committee on the Studies" which reviews all material before final publication is still being maintained by Commission funds until all monographs have been submitted and reviewed

To date the Commission has published the following vol 1, "Current Concepts of Positive Mental Health," by Marie Jahoda, vol 2, "Economics of Mental Illness," by Rashi Fein, vol 3, "Mental Health Manpower Trends," by George W Albee, vol 4, "Americans View Their Mental Health," by Gerald Gurin, Joseph Veroff, and Sheila Feld, and vol 6, "Epidemiology and Mental Illness," by Richard J Plunkett and John E Gordon

Respectfully submitted,
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COUNCIL ON MEDICAL PHYSICS

The Council on Medical Physics was organized in 1956, and this is the fourth annual report

In keeping with the changing concepts relative to artificial respiration, marked revision was begun on the A M A pocket-sized instruction card on artificial respiration This new card places more emphasis on the mouth-to-mouth method of artificial respiration for infants, children, and adults than did the previous card This is part of the Council's program in artificial respiration, which has included sponsorship of a symposium on the various methods, published in May, 1959

The Council voted to publish its report, "Evaluation of Electrical Muscle Stimulation in Providing Pulmonary Ventilation" The report is the result of a two-year study and contains a review of available information in the literature in addition to unpublished data compiled by research workers who cooperated with the Council The paper provides answers to many questions regarding the use of various methods of electrical stimulation in providing pulmonary ventilation

The following are other Council projects Negative Airborne Ion Therapy, the contention that negative airborne ions may have some value in therapy is under study Information was collected from the medical and other scientific literature, investigators, and cooperative manufacturers The Council's study is proceeding with the analysis of these data "Evaluation of Cardiac Resuscitation

Apparatus, is the name of the study which is based on information collected from the literature as well as the data provided by the manufacturers During the course of this study, the introduction of new types of compact equipment compelled extension of the time needed to complete this evaluation project, 'Room Air Filtering Apparatus' Many inquiries are received regarding the efficacy of room air filtration intended particularly for lowering the pollen count within a home Data have been collected relative to this subject, and a general evaluation statement is under consideration

Respectfully submitted,
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JOSEPH H ROYAL Ph D, Assistant Secretary

Committee on Rehabilitation

The Committee on Rehabilitation held two regular meetings, the first in Peoria, Ill, in October, the second at the A M A headquarters building, Chicago, in May

During the first meeting, the film, 'Rehabilitation Adds Life to Years' was reviewed and approved by the Committee for final editing The film was prepared by the American Medical Association under the guidance of the Committee on Rehabilitation

As requested by the Council on Legislative Activities, the Committee considered Senate Bill 772 and House of Representatives Bill 361 (86th Congress), the so-called independent living" bills Accordingly, the Committee adopted a report to the Council on Legislative Activities relative to this proposed legislation

The Committee considered the problem confronting many communities, i e, that several agencies provide similar types of rehabilitation services The Committee strongly urged that every effort be made to coordinate such services at the community level in order to avoid duplication and waste

The Committee participated in a luncheon meeting of the Rotary Club in Peoria attended by about 300 Rotarians and their guests The luncheon speaker was General Melvin J Maas, Chairman of the President's Committee on the Employment of the Physically Handicapped Additionally, the Committee visited the rehabilitation facilities of St Francis Hospital, the Methodist Hospital, and the Peoria Production Shop Such interest, as shown by a Committee of the A M A, was well received and appreciated A local television station carried moving pictures on four news broadcasts showing the A M A Committee on Rehabilitation in session

A portion of the second meeting was largely devoted to a joint meeting with representatives of (1) the Committee on Prosthetics Research and Development of the National Academy of Sciences-National Research Council, and (2) the Committee on Prosthetics Education and Information of the National Academy of Sciences-National Research Council Prof H D Eberhart, Chairman of the first committee, outlined the history and functions of the committee, Harold W Glattly, M D, Executive Secretary of the second committee, stressed the need for dissemination of new information gained from prosthetics research

A review of results obtained in the 1960 survey of constituent society committees on rehabilitation was conducted The questions were similar to those submitted in 1958, and the answers reflected increased interest and activity in rehabilitation

The Committee concluded that it would be worthwhile to attempt to sponsor a national meeting of state medical society rehabilitation committee officers in 1961 The A M A booklet, Medicine's Back to Work Plan," contains the Committee's recommendations, as approved by the House of Delegates, in regard to state society committees on rehabilitation, and has seemingly been a major stimulus causing this increased activity A total of 3,600 copies of the booklet were distributed

Respectfully submitted,
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FRANK H KRUSEN, M D, Chairman
RALPH E DE FOREST, M D, Secretary

COUNCIL ON NATIONAL SECURITY

Meeting and Administrative Actions —The Council held three meetings in Chicago, on Oct 25, 1959, Jan 22, 1960, and May 8, 1960 The Council's Committee on Military Medical Affairs met in New London, Conn, on Oct 5-6, 1959, and in Washington, D C, on March 24-25, 1960, while the Committee on Disaster Medical Care held regional meetings in San Francisco on Sept 26-28, 1959, in Chicago on Jan 23-24, 1960, and in Washington, D C, on April 23-24, 1960

The Executive Committee and other members of the Council met during the 1959 Clinical Session

in Dallas and the 1960 Annual Meeting in Miami Beach Moreover, Council and Committee Members and staff participated in numerous meetings with federal government officials, military leaders, and representatives of constituent medical societies as well as allied medical and health organizations

The Board of Trustees, meeting in Dallas in December, 1959, appointed the following new Council members James E Fitzgerald, M D, Washington, D C, Charles L Leedham, M D, Cleveland, Ohio, Frank F Schade, M D, Los Angeles, Calif, Lien O Simenstad, M D, Osceola, Wis In addition, reappointed to membership on the Council were Harold C Lueth M D Evanston, Ill, Richard L Meiling, M D, Columbus, Ohio, Reuben A Benson, M D, Bremerton, Wash, Carroll P Hungate, M D, Kansas City, Mo, and David Henry Poer, M D, Atlanta, Ga

Harold C Lueth, M D, was elected Chairman at a meeting of the Council on Jan 22, 1960 Richard L Meiling, M D, was elected Vice Chairman The Council members also elected Reuben A Benson, M D, as Chairman of the Committee on Military Medical Affairs and Carroll P Hungate, M D, as Chairman of the Committee on Disaster Medical Care All will serve one-year terms

Council members who retired after many years of distinguished and devoted service are Harold S Diehl, M D, Chairman, New York, N Y, Perrin H Long, M D, Brooklyn, N Y, Walter B Martin, M D, Norfolk, Va, and Herbert B Wright, M D, Cleveland, Ohio

The Board, in February, 1960, appointed Albert H Schwichtenberg, M D, Albuquerque, N M, to membership on the Council and selected the following as members of the Committees of the Council

Committee on Military Medical Affairs Joseph B Copeland M D San Antonio, Tex, Henry A Crawford M D, Cleveland, Ohio, Gerald D Dorman M D New York, N Y, Cortez F Enloe, Jr, M D New York, N Y, and W Bruce Schaefer, M D Toccoa, Ga These Council members are also members of this Committee Reuben A Benson, M D, Richard L Meiling, M D, David Henry Poer, M D, Albert H Schwichtenberg, M D, Lien O Simenstad, M D

Committee on Disaster Medical Care Wayne P Chesbro, M D, Berkeley, Calif, Francis C Jackson, M D, Pittsburgh, Pa, Max L Lichter, M D, Melvindale, Mich, Charles W Steele, M D, Lewiston, Me, and Charles N Wyatt, M D, Greenville, S C These Council members are also members of this Committee Carroll P Hungate, M D, James E Fitzgerald, M D, Charles L Leedham, M D, Harold C Lueth, M D, and Frank F Schade, M D

The Council at its first meeting on Jan 22, 1960, selected David Henry Poer, M D, to represent the Council and to serve in a liaison capacity to the Committee on Federal Medical Services of the Council on Medical Service

Meeting in Chicago on May 8, 1960, the Council approved the recommendations of its Committee on Military Medical Affairs that the responsibility of the Committee be limited to national military medical affairs only and that other matters with which the Committee has concerned itself in the past will be the responsibility of the Council directly In furtherance of this action, Richard L Meiling, M D, Albert H Schwichtenberg, M D, and Lien O Simenstad, M D, were appointed by the Council Chairman to monitor those matters concerned with space activities in the government agencies and their organizations and policies as they affect the national security of the nation and to correlate their efforts with those of the Committee on Aviation Medicine of the Council on Occupational Health The latter Committee is responsible for matters in regard to the technical and professional aspects of aviation and space medicine

Change in Council Name—At its meeting in Chicago in February, 1960, the Board of Trustees approved a change in name of the Council on National Defense to Council on National Security in keeping with the enlarged scope and functions of the Council

Scope and Functions of the Council—As defined by the Board of Trustees in February, 1960, the following statement outlines the scope and functions of the Council on National Security

"Realizing the complexities of the organization of the federal government and the American Medical Association, as well as the changing concepts of our national defense and national strategy

"(a) The scope and purpose of the Council on National Security is to provide advice and assistance to the Board of Trustees and to the medical profession on all matters involving the medical and health aspects of the national security, particularly as such national security pertains to the utilization, mobilization and coordination of medical and health resources

"(b) In the discharge of these responsibilities, the Council shall maintain effective liaison with other councils, committees and others within the Association and shall refer appropriate scientific and professional problems to the proper groups for study, advice and recommendation

"(c) Liaison shall also be maintained with government and non-government departments, agencies and associations on matters involving medical and health problems and activities in national security"

Military Medical Activities—The Committee on Military Medical Affairs met in Washington, D C, on March 24-25, 1960 In separate meetings the Committee was briefed by the following officials and their staffs Frank B Berry, M D, Assistant

Secretary of Defense (Health and Medical), Major General T J Hartford, MC, USA, the Deputy Surgeon General, Department of the Army, representing the Surgeon General, Lieutenant General Leonard D Heaton, Rear Admiral B W Hogan MC, USN the Surgeon General, Department of the Navy, Major General Oliver K Niess, USAF, MC, the Surgeon General, Department of the Air Force, and Clark T Randt, M D, Director, Office of Life Sciences, National Aeronautics and Space Administration

The Committee was briefed on the organizational structure, responsibility, functions and current problems within the medical departments of the military services as well as on the establishment, organizational structure and role of the NASA Office of Life Sciences in the national space effort The latter office was established on March 1, 1960, as one of the five principal offices of NASA

These annual meetings with the senior medical leaders of the military services and federal departments are an effective method in providing a forum for the discussion of medical and health activities and problems which are of mutual concern

These Washington meetings and the earlier fall meeting at the U S Naval Submarine Base, New London, Conn, brought forth at the executive sessions of the Committee many recommendations to the Council Some of the more important results follow

Medical Representative to Joint Chiefs of Staff — The objective of a continuing two-year activity of the Council and its Committee on Military Medical Affairs was realized during the year Medical representation to the Joint Chiefs of Staff at the highest military levels had been urged as essential to effect coordination of the medical and health aspects of tactical, strategic and long-range planning in the Joint Staff, the Unified and Specified Commands and the subordinate Component Commands In March, 1960, the Secretary of Defense directed a request to the Joint Chiefs of Staff to take all appropriate steps to assure that there be a permanent staff authority in each of the established Unified and Specified Command headquarters and a medical staff section in all Specified Command headquarters Moreover, the Secretary of Defense requested the Secretaries of the Army, Navy and Air Force to take necessary action to assure that there be a permanent medical staff section in all Component Command headquarters subordinate to Unified or Specified Commanders These memoranda of the Secretary of Defense have been put into effect insofar as providing billets for medical personnel in these headquarters is concerned

This action by the Secretary of Defense will result in a need for military medical officers being versed in the principles of operational military medicine and the art of military planning Accordingly, at its Chicago meeting on May 8, 1960, the Council adopted a resolution concerning the training of military medical officers for staff positions of the highest responsibility The Council believes that such training is essential if a continuing group of senior medical officers are to be available and qualified to serve as staff officers in Unified and Specified Commands and in other responsible staff positions The Council s resolution was referred to the Board of Trustees for consideration

Armed Forces Institute of Pathology —Meeting in Atlantic City in June, 1959, the House of Delegates reaffirmed its position adopted in December, 1958, and went on record in active support of proposed legislation in the 86th Congress to establish general or flag rank for the Director of the Armed Forces Institute of Pathology during his tenure of office Advised of this policy position were the President of the United States, the Surgeons General of the Departments of the Army, Navy, and Air Force, and the Chairmen of the Committees on Armed Services of the United States Senate and House of Representatives In acknowledgment, the Executive Branch informed the Association that such action is not compatible with existing or projected policies regarding military rank The Committees of the Congress advised that the views of the Association would be considered when, or if, hearings are held Hearings in the pending bills had not been scheduled as the reporting period ended

ICNND Nutritional Surveys —Meeting in Chicago on Oct 25, 1959, the Council adopted the position that it questions the assignment and use of Department of Defense agencies, personnel and funds in nutritional surveys in various countries of the world by the Interdepartmental Committee on Nutrition for National Defense While the Council agreed that nutritional surveys are valuable and have a worthwhile objective, the employment of Department of Defense personnel and funds in conducting such surveys is questioned The Council believes that Department of Defense efforts could better be spent on improving military medicine of the U S Armed Forces and that the conduct of such surveys might more properly be the function of some other agency

The Association s Council on Foods and Nutrition did not agree with the Council on National Security In fact, the Council on Foods and Nutrition recommended that the Council on National Security change its position and join the Council on Foods and Nutrition in an endorsement of the program and objective of the ICNND

At its meeting in Chicago on May 8, 1960, the Council voted, after much discussion, to adhere to the policy position adopted at its meeting on Oct 25, 1959

The two Councils are engaged in joint discussions in an attempt to resolve the differences of opinion

Oversubscription of Berry Plan Deferees —During the past year there has been a surplus of physician

deferees in certain specialty categories under the Armed Forces Reserve Medical Officers Commissioning and Residency Consideration Program, popularly known as the "Berry Plan" A subcommittee of the Committee on Military Medical Affairs met with the Assistant Secretary of Defense (Health and Medical) with respect to this matter For this year the problem has been settled to almost everyone's satisfaction by offering the reserve medical officers a choice of these alternatives (1) transfer to another service where vacancies exist, (2) transfer to the Public Health Service, or (3) acceptance of an assignment not primarily related to their specialty This situation will continue to receive the attention of the Committee and the Council

Single Manager System for Military Hospitals—While there are but twelve regional military hospitals presently operating in the United States, there is under consideration in the Department of Defense a proposal to establish additional regional military hospitals Moreover, there is a DOD instruction on the joint utilization of military hospital facilities world-wide which is under constant review by the Office of the Assistant Secretary of Defense (Health and Medical) The Council continues to study the advisability of the creation of a single manager system for military hospitals

Depletion of Medical Supply Reserve—Meeting in Washington with the Assistant Secretary of Defense (Health and Medical) the Committee on Military Medical Affairs learned that, under the Single Manager System for the procurement of medical supplies, better service is provided under peacetime conditions but wartime capability is lessened The reserve medical supplies, which were built up by the individual services under the old system of medical supply procurement, have been and are being used for current requirements Accordingly, our wartime capability is rapidly being lost Budgetary limitations was the reason advanced for the use of reserve medical supplies for current requirements Formerly, procurement was the responsibility of the three surgeons general Now, however, military medical supplies are procured by the Military Medical Supply Agency of the Bureau of Supplies and Accounts of the Department of the Navy While this agency is responsible for the procurement, storage, distribution and rotation of stocks, it has no operational responsibility

It is believed that if reserve medical supplies continue to be used for current requirements, the military will have no reserve for an emergency This situation would indicate that there is a lack of planning and/or coordination by the Office of Civil and Defense Mobilization, the Public Health Service and the Department of Defense This matter was brought to the attention of the Board of Trustees and will continue to receive the attention of the Council

U S Armed Forces Medical Journal.—As one means of maintaining liaison with physicians on active military duty, the staff, since January, 1954, has prepared a monthly article, now entitled "This Is Your A M A," for publication in the *U S Armed Forces Medical Journal* During the past year, the articles have been devoted principally to informing the military physician about the responsibilities and activities of the various councils and committees of the Association

Upon learning that a proposal to discontinue publication of the USAFMJ was under consideration, the Council advised the Assistant Secretary of Defense (Health and Medical) of its support of continuance of publication Among the reasons advanced for such support are (1) The Journal is a forum for younger medical officers in which their material will be published, (2) the Journal contains much material which is of interest only to military medical personnel, e g, historical medical matters, (3) the Journal contains material which is not apt to appear elsewhere in the medical literature in that it is of specific interest to military medical personnel, (4) the Journal is one excellent morale factor for the military medical officer, and (5) one medical journal for the three Services is most desirable

Survey of Recently Separated Military Physicians.—The opinion survey of recently separated military medical officers, which has been conducted by the Council since 1952, has been discontinued This action was taken in that the replies fell into definite patterns and that little new or useful information was being derived from the survey Moreover, the survey was quite expensive in that considerable staff time was required in relation to the results obtained The Council and staff are always available for questions from active duty and reserve military medical officers and stand ready to assist them at any time in any way possible

Medical Care for Retired Reservists—Two legislative proposals with respect to this subject were introduced in the 86th Congress H R 2552 would provide that retired reservists with three years of active service and their dependents would be eligible for medical and dental care in military facilities on a space-and-personnel-available basis, while H R 11208 would make retired reservists of the military service who have had 30 years of non regular service and who served on active duty during both World Wars I and II eligible for medical and dental care at military facilities on a space-and-personnel-available basis

Under present law, to be eligible for medical and dental care, a retired reservist must have had at least eight years of active duty Retired members of the regular service are entitled to such care under the same circumstances

The Council on National Security advised the Council on Legislative Activities of its opposition to these legislative proposals in that enactment would

require an increase in personnel and funds for the military medical services as well as an increase in funds for the Medicare program Hearings had not been scheduled on these bills as the reporting period ended

Medicare —At its Washington meeting, the Committee on Military Medical Affairs considered the matter of medical care of dependents of military personnel in regard to the problem of (1) the effect of war on the operation of the Medicare program, (2) the care by the military medical services of retired military personnel and their dependents, and (3) the care by the military medical services of the increasing number of dependents per serviceman With respect to the latter two problems, the Committee is concerned in that these situations have increased the dependents' medical load

The Council, on May 8, 1960, agreed that these three problems require special study and approved the recommendation of the Committee that the Executive Vice President of the Association be so advised The liaison representative of the Committee on Military Medical Affairs will discuss this matter with the members of the Committee on Federal Medical Services at the next meeting of the latter committee

Physician Placement Assistance —Since 1952, the Council staff has assisted physicians being released from active military duty by providing information on available civilian opportunities Such information was disseminated to 2,129 physicians during the past year Requests for assistance were received from 315 physicians who were provided placement assistance in cooperation with the Council on Medical Service

U S Armed Forces Medical Academy —As in the prior four Congresses, a bill, H R 720, was introduced in the 86th Congress which would provide for the establishment of a United States Armed Forces Medical Academy If enacted, this bill would establish in the Department of Defense a medical academy to train selected persons for service as physicians with the armed forces

During the last reporting period, the Council on National Security advised the Council on Legislative Activities of its unalterable opposition to this proposed legislation The Board of Trustees approved this recommendation and the House of Delegates, meeting in Dallas in December, 1959 reaffirmed the Board action in opposing this legislative proposal

Aeromedical Transport Service —The House of Delegates, meeting in Miami Beach in June, 1960 commended the Department of Defense and the Air Force for establishing and operating the Aeromedical Transport Service of the Military Air Transport Service and urged that it be maintained as a permanent feature at optimum efficiency The reasons cited were the establishment of new and unprecedented standards for the transport and treatment of battle casualties of World War II and the Korean conflict, the consequent greatly reduced morbidity and mortality among battle casualties, the markedly decreased need for establishing, staffing, and maintaining large and costly medical facilities in foreign countries, and the value of such service in event of major disaster or atomic attack Letters were sent by the Association to the Secretary of Defense, the Secretary of the Air Force, and the Chairmen of the Senate and House Committees on Armed Services

Submarine Medicine Briefing —On Oct 5 6, 1959, the Committee on Military Medical Affairs was briefed on submarine medicine at the U S Naval Submarine Base, New London, Conn Much was learned about the work of the U S Naval Medical Research Laboratory in the fields of auditory, physiology, vision and personnel assessment research The Committee also inspected the new FBM submarine, the U S S George Washington and the U S S Crevalle, a submarine with a distinguished World War II record

Disaster Medical Care Activities —Regional meetings with state medical society representatives and federal medical civil defense officials were held by the Committee on Disaster Medical Care in San Francisco, Chicago, and Washington, D C during the past year These regions comprise a total of 22 states and the District of Columbia

Beginning in October, 1957, regional meetings have been held in Atlanta, Dallas, Boston, Colorado Springs, San Francisco, Chicago, and Washington, D C, in federal Office of Civil and Defense Mobilization regions On the first day of these two-day meetings, the Committee meets with the executive secretary of the medical society of each state in the region, the chairman of each state society emergency medical service committee and the chairman of the committee on civil defense of the Woman's Auxiliary to each state society, as well as federal medical civil defense officials The second day is devoted to an executive session of the Committee

As reported at these regional meetings, the status of medical preparedness in the 50 states and the District of Columbia runs the gamut from a high degree of capability and enthusiastic participation to lamentable indifference, little planning and no programming Accordingly, each meeting has provided a forum where discussion of these wide-ranging capabilities for disaster medical care has stimulated fruitful exchanges of ideas and information More importantly, busy physicians dedicated to the cause of medical preparedness for disaster have returned to their states with renewed enthusiasm and determination to continue the task that is so vital to the nonmilitary defense of the nation

It is at these regional meetings that the Committee gains much of the knowledge essential to adequately advise, through the Council on National Security, the Board of Trustees as to the programs

necessary to implement the leadership role of the Association in this field In addition, the Committee is thereby also able to advise and render assistance to the constituent medical societies as well as the federal departments responsible for the medical and health aspects of non-military defense

There follow some of the more important accomplishments of the Council and Committee on Disaster Medical Care during the reporting period

Chemical and Biological Defense.—In response to a request from the Council, the Director of the Office of Civil and Defense Mobilization advised on Dec 22, 1959, that about 5 million doses of atropine are strategically located in warehouses and prepositioned OCDM hospitals throughout the United States with about 1 2 million of these doses contained in individual injector devices In addition, about 30,000 of the organizational protective masks which were procured from the Army Chemical Corps are being prepared for distribution to the various states and to the federal agencies for training purposes A similar number of the light-type Army masks which were excess to the requirements of the Department of Defense have been obtained and are also being distributed for training The OCDM has completed the final engineering tests in the development of a civilian protective mask and it is believed that during fiscal year 1961 the required production line techniques, tooling and special equipment will be completed and that thereafter they can go to commercial concerns for the mass production of these masks

A further response was received on Feb 5, 1960, from the OCDM Director of Health Services who advised that the U S Public Health Service recommends against distribution of the federal stockpile of atropine to the nation's physicians at this time The bases for the recommendation are prelocation of atropine is not possible at the present time, prelocation in the physician's hands at this time would not insure effective use in the event of chemical warfare attack, and distribution of available stockpile atropine supplies would place in each physician's hands only about 12 2-mg doses which would not be sufficient to treat the potential patient load

Utilization of Reservists for Civic Defense Duties—Upon recommendation of the Council on National Security, the Association actively supports the utilization of reserve armed forces units and personnel for civil defense operations On May 26, 1960, the Association sent a letter to Senator Strom Thurmond, Chairman of a special subcommittee of the Senate Committee on Armed Services, expressing the Association's active support of S Res 67, 86th Congress This resolution would authorize the Senate Committee on Armed Services to make a study with a view to developing a plan for organizing and utilizing the reserve components of the Armed Forces of the United States in carrying out the civil defense program in the event of an armed attack

On June 1, 1960, at a public hearing on this proposed resolution, the Director of the Office of Civil and Defense Mobilization testified against the resolution because he considered it unnecessary and does not believe that the Department of Defense should have any statutory authority with respect to civil defense The Assistant Secretary of Defense (Personnel and Reserves) testified against the resolution and stated that there were no surplus reserves which could be committed to civil defense as a primary responsibility

Advisory Services to Public Health Service—Upon request, the Council is advising and otherwise assisting the Division of Health Mobilization of the U S Public Health Service in regard to planning and programming the nation's medical and health preparedness effort for natural or enemy inflicted disasters Major PHS program emphasis is as follows

a Medical Self-Help The Council's Committee on Disaster Medical Care has cooperated with, encouraged, and advised the Public Health Service concerning the establishment and implementation of a program designed to develop information and skills which a layman would need to meet his own health needs if a physician is not available immediately, and possibly for extended periods of time The Committee members have reviewed the draft of a booklet entitled "Your Health If Disaster Strikes' which is being prepared for distribution to the general public

b Health Manpower Management Realizing that the number of physicians and allied and medical health personnel surviving a nuclear attack would not be sufficient to treat the millions of casualties, plans are being developed by the Public Health Service to insure the most provident use of such skilled personnel

c PHS Inactive Reserve Corps officers Plans are being developed to place such personnel on duty one day a week to work on emergency medical and health care measures in their own communities under the direction and program control of the state and local health authority It is anticipated that selection will be jointly approved by the State Health Officer, the State Civil Defense Director and the State Medical Society

d Training The first three one-week Public Health Service health mobilization courses have been conducted in 1960 for physicians and other personnel concerned with emergency medical and health problems Future courses will be open to all health service workers and will be held periodically in various states

Hospital Disaster Planning—The Council's Committee on Disaster Medical Care has initiated a close working relationship with the Committee on Disaster Planning of the American Hospital Association with a view to the establishment of criteria to determine the adequacy of hospital disaster plans

in connection with accreditation by the Joint Commission on Accreditation of Hospitals

County Medical Societies Civil Defense Conference —The 10th conference sponsored annually by the Council, was held on Nov 7-8, 1959, in Chicago There was a record attendance of 270 officials of state and county medical societies and other medical and health allied personnel active in civil defense affairs representing 33 states, including Hawaii, the District of Columbia, and Canada The attendance last year was 217

The conferees heard outstanding speakers report on civil defense and disaster topics Conferees also participated in workshop sessions which afforded an opportunity to discuss and exchange information on medical preparedness for disaster Each year the exhibit feature of the conference has expanded This year exhibits were displayed by eight organizations

The conference adopted a resolution of commendation for the efforts of the Council in sponsoring the annual county medical societies civil defense conferences and the annual national medical civil defense conferences and requested that the Association continue to support and sponsor these conferences through its leadership, prestige and resources so that the motivation and education of members of the medical and health professions in disaster care may be increased and strengthened

National Medical Civil Defense Conference — The Council sponsored its eighth annual National Medical Civil Defense Conference in Miami Beach in June, 1960 This Family Room of Tomorrow" was built by the American Institute of Decorators at considerable cost to demonstrate that a fallout shelter need not be austere

The exhibit was staffed by nurses active in medical civil defense in Dade County through arrangements with the Dade County Medical Society

In connection with the exhibit, 1,600 copies of the A M A Summary Report on National Emergency Medical Care were distributed In addition, a postal card opinion survey on shelters was conducted

Immunizations, Medical Emergencies and Identification —On May 8, 1960, the Council approved the recommendation of its Committee on Disaster Medical Care and endorsed in principle the need for a conference to discuss the broad principle of identification in emergencies involving unconsciousness and recommended to the Director of the Division of Environmental Medicine that an early meeting be called to explore the objectives of the resolution concerning immunizations adopted by the House of Delegates at the December 1959 Clinical Session in Dallas The resolution urged that citizens get proper tetanus toxoid, original and booster, from their physicians and immunizations as indicated, that public health officials, civil defense organizations and other interested groups be requested to study means of identifying persons who have been immunized and that they make recommendations regarding this phase of the problem, that members of the Association cooperate in this educational program as was done in the successful polio immunization campaign, and that public health services, newspapers, television, radio and other public media be utilized to the fullest extent in advising our citizens of this critical need

Activities at Regional Level for Individual Committee Members —The Council, on May 8, 1960, approved the recommendation that each member of the Committee on Disaster Medical Care should work closely with the Office of Civil Defense Mobilization and U S Public Health Service medical officials as well as the state medical societies in the OCDM region in which the member resides To facilitate close cooperation, each Committee member will attend, at various locations in his region, a maximum of four meetings per year concerned with medical disaster preparedness

Flying Physicians Association —The Council continues to encourage and assist the Flying Physicians Association in participating in the civil defense plans and programs of state medical associations and state and local governments The Flying Physicians Association is a national organization with more than 1,500 physician members Because of mobility and professional skill, the members of this organization are a most valuable resource in a disaster situation

Public Health Service Briefing —The members of the Committee on Disaster Medical Care were briefed on public health problems in civil defense by the U S Public Health Service in Washington, D C on Oct 28-29, 1959 The briefing (a) illustrated the relationship of PHS on-going programs to its Health Mobilization Program, (b) oriented the Committee concerning current and proposed civil defense programs in health and medical care, and (c) explored program requirements with the Committee with a view to developing the role of non-government organizations

Courses on Management of Mass Casualties — Each year, spaces for civilian physicians for these courses are made available to the Council by The Surgeon General, Department of the Army Conducted at Walter Reed Army Medical Center, Washington, D C and Brooke Army Medical Center, Fort Sam Houston, San Antonio, Tex, these one-week courses were attended by seven civilian physicians under the Council's quota for fiscal 1960 For fiscal 1961, beginning July 1, 1960, 10 spaces have been allotted to the Council

Proposed National Health Plan —The Director of Health Services, Office of Civil and Defense Mobilization, expressed appreciation to the Association for the significantly helpful comments and suggestions submitted to OCDM by the Council's Executive Committee and the Committee on Disaster

Medical Care with respect to the working draft of Annex 18, National Health Plan to the National Plan for Civil Defense and Defense Mobilization

Naval Radiological Defense Laboratory Briefing —On Sept 28, 1959, while in San Francisco for its fifth regional meeting, the Committee on Disaster Medical Care visited the U S Naval Radiological Defense Laboratory where an all-day program was presented The Committee was briefed on the research objectives and programs of the Laboratory and toured its facilities

Publications —The Council's bi-monthly newsletter, the Civil Defense Review, devoted primarily to medical civil defense news, is distributed to 2,400 civilian and military physicians, allied medical and health personnel, government officials, and organizations

Nearly 10,000 copies of a Summary of the A M A Report on National Emergency Medical Care were distributed during the last eight months of the reporting period Prepared at the request of and for the Office of Civil and Defense Mobilization under the guidance of the Council by a special commission, the Report was submitted to OCDM on April 15, 1959 The Report embodies recommendations with respect to the planning, training and operational organization needed as a basis for a national emergency medical care plan for the treatment and care of casualties and noncasualties prior to, during and after a thermonuclear attack upon the United States The Report highlights recommendations with respect to problems concerning the role of the medical and associated professions, their functions, responsibilities and training for medical disaster preparedness

Hundreds of copies of the proceedings of conferences sponsored by the Council as well as other selected material on the medical and health aspects of civil defense have been distributed

Other Council Activities

Aeronautics and Space —The House of Delegates meeting in Dallas in Dec, 1959, approved the assignment by the Board of Trustees of responsibility in regard to aeronautics and space matters as such pertain to the medical profession Responsibility in this field is shared by the Council on National Security and the Committee on Aviation Medicine of the Council on Occupational Health The Council on National Security is concerned with space activities in the government agencies and their organizations and policies as they affect the national security of the nation, while the Council on Occupational Health is concerned with the technical and professional aspects of aviation and space matters In other words, the Council on National Security has primary interest in and corresponding responsibility for the national security aspects of aviation and space, e g, the organization and policies as they pertain to the marshalling of the nation's medical and other health personnel and material in preparation to withstand, or to cope with, the ravages of an airborne or space attack upon the nation The Council on Occupational Health has primary interest in and corresponding responsibility for aerospace medicine proper, e g, the establishment and application of standards of fitness of personnel to operate or to travel in aeroplanes or other vehicles in near or distant space

Appreciation —The Council and its Committees appreciate the cooperation and assistance received during the past year from the House of Delegates, the Board of Trustees, other Association councils, committees and officers, allied professional organizations and officials of government agencies

Respectfully submitted,
REUBEN A BENSON, M D
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CARROLL P HUNGATE, M D
CHARLES L LEEDHAM, M D
DAVID HENRY POER, M D
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ALBERT H SCHWICHTENBERG M D
LIEN O SIMENSTAD, M D
RICHARD L MEILING, M D, Vice Chairman
HAROLD C LUETH, M D, Chairman
F W BARTON, Secretary

COUNCIL ON OCCUPATIONAL HEALTH

Organization and Method of Operation —The Council developed and presented to the Board of Trustees recommendations for potentially far-reaching changes in the Council's committee structure and method of operation These changes, which the Board approved at its June, 1960, meeting, will result in the replacement of the Council's numerous committees with three permanent committees namely, the existing Committee on Aerospace Medicine, a Scientific Committee, and a Professional and Public Affairs Committee These three committees will cover all the areas handled previously by the many committees Outside consultants will be used as needed to advise and assist the committees

Activities of Council Committees —The following committees met and were active during the year Committee on Occupational Cancer, Committee on Occupational Dermatoses, Committee on Industrial Health Emergencies, Committee on Medical Care for Industrial Workers Committee on Mental Health in Industry, Committee on Neurological Disorders in Industry, Committee on Industrial Nursing, Committee on Industrial Ophthalmology, Committee on The Pneumoconioses

Committee on Industrial Medical Records, Committee on Workmen s Compensation, and Committee on Aerospace Medicine

The following are the highlights of Committee activities

Committee on Industrial Health Emergencies — This Committee's "Guide for Industrial Immunization Programs' was approved by the Board of Trustees and published in THE JOURNAL Reprints have been made for distribution Ready for submission to the Council is a statement on The Use of Expired Air (Mouth-to-Mouth, Mouth-to-Nose) Resuscitation in Industry" A "Guide to Developing an Industrial Disaster Medical Service' is nearing completion In conjunction with the Committee's work on the latter statement, the staff attended sessions of the 10th County Medical Society Civil Defense Conference, which is sponsored annually by the Council on National Defense

Committee on Neurological Disorders in Industry —Nearing completion is a Guide to the Classification and Employment of Individuals with Neurological Disorders' A final draft of this statement has been submitted to the Committee for approval This is the type of activity—looking to the employment of the handicapped—commended to the Council by the House of Delegates at the instance of its Reference Committee on Hygiene, Public Health and Industrial Health at the 1960 Annual Meeting In conjunction with the activities of the Committee on Neurological Disorders in Industry, staff attended both the Second National Epilepsy Institute and the 11th Western Institute on Epilepsy Dr Melvin D Yahr, Committee Chairman, appeared on the August 27 Dave Garroway TV network show and made an excellent presentation, which should help clear up the widespread misunderstanding concerning the employment of individuals with neurological disorders

Committee on The Pneumoconioses —In the development of its projected statement on The Pneumoconioses—Diagnosis, Evaluation, and Management, the Committee met with Council Emeritus Chairman, Dr Anthony J Lanza, a Public Health Service pioneer in the investigation of the pneumoconioses, and two Public Health Service medical officers currently investigating the pneumoconioses, namely, Drs W Clark Cooper and Robert H Flinn The statement is being developed for the purpose of improving the knowledge of the pneumoconioses on the part of physicians not specializing in diseases of the lungs The Committee visited the PHS Occupational Health Field Headquarters in Cincinnati, at which time the Field Headquarters staff presented a program on pneumoconioses, primarily on the prevalence of silicosis among workers in United States mines

Committee on Occupational Dermatoses —This Committee is engaged in the preparation, for publication in THE JOURNAL, of a report to be titled 'What's New in Occupational Dermatoses," the content of which will be as indicated by its name

Committee on Industrial Medical Records —This Committee's "Guide to the Development of an Industrial Medical Records System" is being readied for submission to the Council This will include the first three simplified and standardized industrial medical record forms of a series the Committee is planning to develop In preparation for its work on this Guide," the Committee met with and heard presentations by Dr Edward P Thompson, Editor, and Mrs Adeline Hayden, Associate Editor, of the A M A's 'Standard Nomenclature of Diseases and Operations" The Committee studied in detail both the "Standard Nomenclature and the "International Statistical Classification systems of coding for medical records

Committee on Industrial Ophthalmology —A statement on The Use of Tinted Lenses in Night Driving" was published in THE JOURNAL and has been reprinted for distribution Two other statements, Guiding Principles and Procedures for the Industrial Nurse in the Care of Eye Injuries," and "Retinal Detachment," have been completed A statement on safety eye wear is being considered Staff assisted in the development of a panel discussion presented by the Committee before the Section on Ophthalmology of the Ohio State Medical Association at the latter's annual meeting

Committee on Occupational Cancer —This Committee is continuing its consideration of known, suspected, and potential carcinogens among substances manufactured and used in industry

Committtee on Mental Health in Industry —A Joint Committee of the Council on Occupational Health and the Council on Mental Health this Committee is developing criteria for the employment and reemployment of mentally and emotionally "restored" individuals The Committee has had representatives of the Industrial Medical Association, the American Psychiatric Association, the Group for the Advancement of Psychiatry, the American Academy of General Practice and the National Association for Mental Health meet with it and report on the activities of their associations in mental health in industry

Committee on Industrial Nursing —In cooperation with the Council's Committee on Industrial Ophthalmology, the Committee studied and made suggestions concerning the Committee s on Industrial Ophthalmology proposed publication "Guiding Principles and Procedures for the Industrial Nurse in the Care of Eye Injuries" In cooperation with the Council s Committee on Industrial Medical Records, the Committee prepared a short statement on the nurse's role in the keeping of industrial medical records The Committee on Industrial Medical Records found this statement useful in preparing its "Guide to the Development of an Industrial Medical Records System"

Committee on Workmen's Compensation—The Committee met with the Medical Committee of the International Association of Industrial Accident Boards and Commissions to discuss medical problems in workmen's compensation Two Committee members presented papers at the IAIABC meeting

No statements were published during the period covered by this report, but the Committee and staff continued to seek information on such problems as the employment of persons with cardiac disease, the relation of work to heart disease, compensation neurosis, medical advisory committees to workmen's compensation administrative agencies, fee schedules in workmen's compensation, impartial medical testimony, second-injury laws and waiver of defects

Committee on Aerospace Medicine—This Committee prepared materials in defense of the A M A's stand favoring the designation of physicians for Class III pilot examinations, concerning which the staff received and answered over 200 letters The committee staff helped develop a statement presented by the A M A's representative at the Federal Aviation Agency's hearing on this matter in February in Washington, D C The Committee is processing for A M A approval a statement initiated by the Aerospace Medical Association to guide physicians in advising patients on flying as passengers on scheduled commercial flights The Committee adopted a stand that pilots of passenger-carrying commercial airplanes should be grounded at age 60 The Committee, with staff assistance, maintained the closest possible liaison and cooperation with other organizations, governmental and private, active and interested in aerospace medicine The Committee studied the organization, staffing and operations of the Federal Aviation Agency's Bureau of Aviation Medicine and its field facilities, and discussed ways in which the Committee might best advise and assist it in the improvement of flying safety Staff aided in developing Council recommendations concerning federal legislation on FAA activities in such areas as civil aviation medical research, human requirements in aircraft design and conditions of operation, and the medical causes of aircraft accidents

Committee on Medical Care for Industrial Workers—A Joint Committee on the Council on Occupational Health and the Council on Medical Service, this Committee considered a variety of problems relating to the provision of occupational medical care to workers in industry The major activity of the Committee at present is the preparation, in collaboration with the CMS Committee on Insurance and Prepayment Plans, of "Guides to Physician Relationships with Medical Care Plans" This set of guides will be discussed with medical directors of various medical care plans and with medical society representatives from the several regions of the country, at meetings in such cities as New York, Washington, Chicago, and San Francisco Another project of the Committee was the preparation of a report on "A Survey of Management Health Centers," Which recently was published as a separate publication The Committee's report on its "Survey of Physicians' Services in Small Plan Occupational Health Programs," was published in THE JOURNAL It is believed that the latter study will prove extremely significant, since many inquiries have been received from physicians in private practice indicating their interest in serving occupational health programs In view of the fact that the overwhelming majority of industrial, business, and commercial establishments in this country are "small," i e, employ fewer than 500 employees, the fact that about three-fourths of the nation's working population is employed in such "small plants" and the fact that few of these plants have a physician's advice or services, the Committee believes that physicians in private practice should be induced to make their services available on a part-time basis for promoting the health and safety of this large segment of the working population The Reference Committee on Hygiene, Public Health and Industrial Health in its report to the House of Delegates at the 1960 Annual Meeting recommending adoption of the revision of the A M A's statement on "Scope, Objectives, and Functions of Occupational Health Programs" called attention to this need for physician services to industry on a part-time basis

The Council approved a plan for "Revitalizing Relationships Between State Industrial Health Committees and the A M A Council on Occupational Health," which is intended to further the Council's grassroots liaison program

There was not held during the period covered by this report the Annual Conference such as had been held in previous years with the chairmen of the state medical association committees on industrial health in conjunction with the Congress on Industrial Health, as this Congress is to be held in the month of October in 1960 (It has been held in January or February in 1959 and previous years)

Congress on Industrial Health—No Congress on Industrial Health was held during the period covered by this report, because the Congress in 1960 and thereafter is to be in the fall Staff held several meetings and engaged in a great deal of correspondence with the state and county medical societies and other groups in North Carolina in the furtherance of plans for the 1960 Congress, which is to be held in Charlotte, N C on October 10-12 Conferences have also been held with representatives of the Colorado State Medical Society and its Industrial Health Committee to lay the groundwork for the 1961 Congress, which will be held in Denver

Activities and Honors of Individual Council Members—Two Council members were especially honored by their state medical societies in the past year, namely, Dr John N Gallivan, who became the

President of the Connecticut State Medical Society, and Dr Lemuel C McGee, who was named President-Elect of the Medical Society of Delaware

Dr William P Shepard, Council Chairman, received the Knudson Award of the Industrial Medical Association, the highest award of that organization, for meritorious services in occupational health At the 1960 Annual Meeting of the American Academy of Occupational Medicine, Dr Shepard delivered the Banquet address, A Medical Director's Views on Retirement, and Dr Robert A Kehoe, Council Vice Chairman, the George H Gehrmann Memorial Lecture, 'A Tribute to George H Gehrmann, M D' Dr Sterner was elected President-Elect of the National Health Council at its 1960 meeting Dr Sterner also served as program chairman for the 1960 Industrial Health Conference reported on above Doctors McGee and Shook spoke on occupational health at the 1960 annual scientific meeting of the American Academy of General Practice in Philadelphia Dr V C Baird was named President of the Medical Research Foundation of Texas, a statewide, non-profit organization dedicated to the support of basic research facilities

Meetings were held by the Council and staff with the Division Director, Executive Vice President, Chairman of the Board of Trustees, and the Board's Socio Economic Activities Committee regarding the channels of communication and authority and the relationships between the Council and the Board and between the Council and the A M A staff Also discussed was the Council's total mission Plans were made for a meeting of the Council as a whole with the Board of Trustees to discuss further these and other questions of mutual interest

Council meetings were held in October, January, and March The October meeting was held at the Los Alamos Scientific Laboratory, whose scientific and medical personnel presented for the Council a one-day program on that institution's occupational health program

Dr Seward E Miller A M A and Council liaison member for air pollution with the American Society of Mechanical Engineers, was aided by staff in the preparation of a script entitled "Industrial and Community Air Pollution," which Doctor Miller recorded for presentation over Radio Station KYW in Cleveland

At the request of the Director of the Industry Office of the U S Office of Civil and Defense Mobilization, Dr Norvin C Kiefer, Chairman of the Council's Committee on Industrial Health Emergencies, and staff authored an article entitled Industrial Medical Services in Disaster' for the July, 1960, issue of *Industrial Security*, the official publication of the American Society for Industrial Security

Respectfully submitted,
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R T Johnstone, M D
E S Jones, M D
L C McGee, M D
M N Newquist, M D
O A Sander, M D
C F Shook, M D
J H Sterner, M D
Jan H Tillisch, M D
R A Kehoe, M D, Vice Chairman
W P Shepard, M D, Chairman
B D Holland, M D, Secretary

COUNCIL ON RURAL HEALTH

During the past 22 months the American Medical Association has been undergoing a reorganization both in its physical plant at 535 North Dearborn and in the structure and working of the committees and councils In the reorganization seven divisions were established, and at its meeting on Feb 5-7, 1960, the Board of Trustees further established a Division of Environmental Medicine, under the direction of Franklin D Yoder, M D Our staff reports to Doctor Yoder and the Council reports to a Committee of the Board of Trustees In May of last year, a Study Committee of our Council reported to the Committee of the Board of Trustees on a proposed program for the Council on Rural Health

Chairman's Report

In part the chairman's report said, We feel we must call the Board's attention to the fact that we enjoy wholehearted and open cooperation from the farm groups certainly, considering all the present circumstances, nothing should be done to jeopardize an existing friendly relationship

It is our conviction that this friendship was acquired and has been maintained by a philosophy of action adopted at the beginning of our existence Basically, that philosophy was to listen sympathetically to accounts of the troubles of our friends, and then to offer suggestions which we felt might help them to help themselves Thus by the Council on Rural Health and through it, the American Medical Association has been personified as a sympathetic and helpful partner in the minds of both rural people and their leaders

"While be believe our basic philosophy should not be changed, yet evidence is accumulating which suggests that our program should be altered and broadened, and our techniques modified For example, the great cause of discontent in the beginning was lack of rural physicians The complaint

was a justifiable one and the demand has been well satisfied Now the complaints and concerns which are voiced nation-wide and most frequently are cost of medical care, problems of the aged, mental health, and an indifferent attitude on the part of individual members of the medical profession

"There are many other problems that concern rural people, the magnitude of which varies with localities, by areas, and with time Migrant farm workers, school health problems, animal diseases affecting humans, rural sanitation, the urbanization of rural areas and, of course, the ever-present problems of nutrition and accident prevention are a few examples that fall in this category The problems themselves are not so important, as is the fact that both farm people and their leaders look to the American Medical Association Council on Rural Health for help in their solution

"On the basis of such considerations as these, we believe our program should be broadened and modified to encompass the following activities

1 A closer liaison with the several farm groups to the end that (a) we may more quickly sense changes in attitudes or conditions, (b) we may be in a better position to channel pertinent information through national organizations to their state associations, (c) we may be in a better position to gather pertinent information for transmittal to our own state organizations, and (d) we may maintain and strengthen those already existing and valuable friendships

2 That the National Conference program be modified and broadened as follows

(a) There shall be one national conference to be held in Chicago It is to be invitational This conference should be in the nature of an educational or training program for certain selected farm leaders, extension agents, home demonstration workers, health educational people, and others

(b) There shall be several regional conferences each year in such localities and at such times as to make it convenient for farm people from several states to attend These shall be similar to our national conferences of the past, but will last only one or two days They have already been tried both in New England and in the Rocky Mountain states and have proven to be quite valuable Tentative arrangements have been made for the first two They probably will be held in Atlanta, Ga and Salt Lake City, Utah

(c) There must be more regional conferences for members of state rural health committees to the end that they may become better acquainted with the philosophies and techniques of the Council There have been three of these at Purdue University, Lafayette, Indiana, but we need more of them and in different localities, to reach more rural health committees of their state associations

3 Frequent and continuing contact with farm groups at both national and state levels, and with state medical associations through field representatives "

An arrangement has been worked out with the Field Service Division for its staff to make these state contacts in carrying on the field work of the Council, and an agreement that the Director of the Field Service Division and the Director of the Division of Environmental Medicine make as many national contacts as possible

The Council has accepted the suggestion that we have some active program which would be of equal importance in all sections of the country It was suggested that this universal program should be immunization, first against polio and later, or even simultaneously, against tetanus It is very simple for us to talk, at the national level, about various problems of rural health as we see them, but the difficulty is in accomplishing the desired results The actual work and organization must be done in the counties or even communities

If we are to do battle against any problem on a *nation-wide scale*, the first essential is an efficient line of communications Without a sure method of getting messages to and from the actual firing line, a favorable result cannot be expected In the case of rural health, we must have a two-way road whereby we can disseminate information to the places where the actual work must be done Workers in these areas must also be able to reach us so we may know their problems

Some years ago the Council asked that each state medical society appoint a rural health committee This was done in 40 states, and those not having separate committees have assigned the rural health program to other related committees The Florida Medical Society for the first time appointed a Rural Health Committee, consisting of five members Heretofore, the rural health program was included as a part of the activities of the Committee on Public Relations It has also been suggested that each of these rural health committees appoint a member or at least a representative in each component or county medical society Another important suggestion—that each farm organization request its respective state association to appoint a rural health committee so that a unified program could be established and activated

It is the belief of the Council that rural health problems can best be solved by first organizing a group of interested persons in each state who represent the same national organizations which are active as members of our Advisory Committee We would then have a contact with whom we could

work to carry out worthwhile programs originating at the national level Each state in turn would then have a national contact for exchange of ideas or from which to receive help in solving problems that are not of a national scope, but peculiar only to their area

At its meeting in Dallas, Dec 1-3, 1959, the House of Delegates reviewed the report of the Council on Rural Health as published in the Handbook, and voted to adopt the following report of the Reference Committee on Insurance and Medical Service

"The activities of the Council on Rural Health, the good will it has created and the enthusiasm it has engendered for sound cooperation between medicine and farm organizations are to be highly commended Each activity of the Council is praise-worthy Especially its encouragement of medical scholarship and loan fund programs sponsored by several state medical associations

Council Appointments

Francis T Holland, M D, of Tallahassee, Fla, was appointed a Council member to take over a new region created by a regrouping of states With the new regrouping of states, the Council is now composed of 10 regions

Chairman Emeritus

F S Crockett, M D, of West Lafayette, Ind, former Chairman of the Council, has been made Chairman Emeritus Doctor Crockett attended the Seventh Annual Arkansas Rural Health Conference in Little Rock, July 30-31 He also met with members of the Indiana Medical Society and the Indiana Farm Bureau to formulate a rural health program for the Indiana Farm Bureau that was presented as a resolution on health to their state House of Delegates

Council Member Contacts and Activities

F A Humphrey, M D, Chairman, attended (a) Colorado State Rural Health Committee meeting, (b) the Blue Shield-Blue Cross meeting in Denver, (c) the Extension Committee on Organization and Policy of the Land Grant Colleges, and (d) all Council, Advisory, and Executive meetings

Carll S Mundy, M D, Vice Chairman, (a) attended all sessions of the Council, Executive, and Advisory meetings, (b) represented the Council at the Ohio State Medical Society s annual meeting

Norman H Gardner, M D, Vice Chairman and Director of Region I, (a) was appointed a member of the Medical Advisory Board of the Sears-Roebuck Foundation, (b) conducted the Fifth Annual New England Rural Health Conference in Amherst, Mass, (c) was the keynote speaker at the Rural Health Conference of the Connecticut Health League at the University of Connecticut—this group is composed of voluntary health organizations, the health department and the medical and allied professions, (d) attended all Council, Executive and Advisory meetings

W Wyan Washburn, M D, Director of Region II, addressed (a) the South Carolina Society of Medical Technologists, (b) two separate church groups in North Carolina on phases of international understanding, (c) Western North Carolina Public Health Association, (d) five-county-community conference at Pfeiffer College, (e) panel member, workshop on home care, (f) attended the North Carolina Medical Society officers conference in Pinehurst, (g) participated in a regional meeting of the National Health Council held at the University of North Carolina, Chapel Hill, and (h) attended all Council and Advisory meetings and the June Executive Committee meeting

Francis T Holland, M D, Director of Region III, was appointed to the Council in January of 1960 In addition to being active in the state rural health committee, he met with the Executive Committee to assist in the formulation of plans for a regional conference to be held in Atlanta, Ga, in October, 1960

Edmond K Yantes, M D, Director of Region IV, (a) attended meeting of the Executive Board of the Ohio Rural Health Council and was appointed to the seven-member Welfare Board of the State of Ohio, later elected chairman, (b) attended the annual meeting of the Ohio Council on Health and Welfare and was elected to the Board, (c) attended the planning meeting for District Health Conference in Springfield, Ohio, (d) attended the Ohio State Medical Association meeting in Cleveland and was elected delegate to A M A, (e) attended the executive committee meeting of the A M A Council on Rural Health in Miami Beach where initial plans were formulated for the first Regional Conference of Southeastern states in Atlanta, Ga, and (f) attended the Council meeting in Grand Rapids Rural medical scholarships, medical school lectures, and preceptorships are continuing programs of the Ohio State Rural Health Committee Doctor Yantes is also chairman of the Committee on Care of the Aged of the Ohio State Medical Association and is actively engaged in planning the state program for this committee

Ben N Saltzman, M D, Director of Region V, (a) attended two meetings of the Rural Community Improvement Group, and addressed a meeting of 300 farm people on the work of the Rural Health Council In this Rural Community Improvement program there are 400 communities represented which seems to be an ideal way to get to the people we are seeking (The next meeting will outline plans for this project), (b) attended the Seventh Annual Arkansas Rural Health Conference in Little Rock, and (c) attended the Council meeting in February in Grand Rapids

Samuel P Leinbach, M D, Director of Region VI, (a) attended a meeting of Advisory Committee of Institute of Agricultural Medicine at the University of Iowa, (b) served as banquet speaker for the Lutheran Hospitals and Homes Society at their annual meeting at North Platte, Neb—this society strongly believes and is symbolic of the philosophy that the best in health care can only be given in the environment of free enterprise, (c) worked with the Rural Health Committee of the Iowa State Medical Society in a detailed study of the total socio-economic changes that are occurring in rural Iowa as a result of the shrinking farm population, (d) worked with the Iowa State Medical Society and the Iowa Farm Bureau in developing plans for providing liberal loans to students in medical schools who agree to return to rural Iowa to take up medical practice, the Illinois State Medical Society and the Illinois Farm Bureau are acting as consultants on this project, and (e) attended all Council and Advisory meetings

Allen T Stewart, M D, Director of Region VII, attended all Council and Advisory meetings

Reed W Farnsworth, M D, Director of Region VIII, (a) reports active rural health committees functioning in the states of Montana, Wyoming and Colorado, in Utah the state rural health committee is being re-organized, (b) represented the Council at the Board of Trustees meeting of the Utah Extension Service held in Logan, (c) attended Council meeting at Grand Rapids in February

Herbert E Mason, M D, Director of Region IX, attended (a) the annual meeting of Oregon Health Council, (b) two state Rural Health Committee meetings, (c) all Council and Advisory meetings, (d) and the meeting of the Oregon Rural Health Council to plan the program for their annual meeting

The Oregon Rural Health Committee Chairman after attending the National Conference in Grand Rapids made the following recommendations to the House of Delegates of the Oregon State Medical Society

1 That the Society support the proposed Regional Rural Health Conferences contemplated by the Council on Rural Health of the American Medical Association
2 That component medical societies be urged to establish committees or take other appropriate action to encourage and foster a high level of protection for all citizens against those diseases for which a recognized immunization agent is available
3 That a preceptorship program be actively promoted by an appropriate Society committee in cooperation with the University of Oregon Medical School with the ultimate objective of making such a program compulsory
4 That the practice of visiting consultants serving the rural areas of the state be approved
5 That no change be made in the physician placement service program sponsored by the Society under the supervision of the Committee on Rural Health and that the Society's headquarters staff be highly commended for their exceptional administration of this important function

The activities of the state Rural Health Committee in Washington included the setting up of rural health councils within the state, maintaining liaison and promoting medical public relations with various farm organizations and groups A member of the Committee has represented the Washington State Medical Association at each of the six meetings in Yakima sponsored by the Washington State Farm Bureau and known as "Power Through Health" meetings These meetings have started as a primary function and attempt to encourage better nutrition among teen-agers, and the program is rounding out into other fields This is a very worth while program and we recommend that your Rural Health Committee of next year continue the cooperation and liaison work that we have begun with the Washington State Farm Bureau and Washington State Dairy Association Among other activities of this committee were attendance at the Washington State Rural Health meeting, conducting a study of the physicians in rural practice and finding that almost 95% of these physicians came from rural areas This committee has been working on various ways to stimulate boys from rural areas to go into the study of medicine, also participated in science fair run in conjunction with the county and district state fairs

Carroll B Andrews, M D, Director of Region X, (a) attended the California Farm Bureau Annual Convention in Los Angeles, addressed their Rural Health Department annual meeting on the subject, "The Rural Health Team," moderated and handled the commentary and discussion period on the movie, "Helping Hands for Julie," and (b) attended all Council and Advisory meetings

Charles R Henry, M D, (a) participated in the Seventh Annual Arkansas Rural Health Conference held in Little Rock, July 30-31, at which A M A President Louis Orr was banquet speaker and stressed family responsibility in the care of the aged, (b) attended September Council and Advisory meetings

National Contacts

Among the national contacts were (a) the annual meeting of the National Home Demonstration Council, (b) the American Country Life Association annual conference, and the (c) American Farm Bureau Federation annual meeting

Regional, State, and District Meetings

The Fifth Annual New England Rural Health Conference sponsored by the Council of New Eng-

land State Medical Societies and the Council on Rural Health was held in Amherst, Mass This was conducted by Norman H Gardner, M D, Director for Region I Ten states participated It is believed that this particular type conference is more appropriate for this region because of the varied interests of its rural people There were 10 states that held rural health conferences and North Carolina beside the state meeting had a series of Community Health Conferences sponsored by the Medical Society in cooperation with 22 advisory groups

State Rural Health Committee Activities

Through its state Rural Health Council, Florida is continuing to provide leadership for the various rural groups in that state Among the projects undertaken this year were pesticide information center, farm safety, migrant labor, aging developments, food faddisms, and antibiotics Two new advisory groups were added to the Council as follows the state dental society and the state pharmaceutical association In Illinois the state medical society continues its cooperation with the Health Improvement Association The Georgia Rural Health Committee published an insurance booklet, explaining in lay language the various types of insurance for the purpose of helping rural citizens get desired coverage This booklet also accompanied the medical membership card from the Georgia Medical Association This state was also instrumental in assisting the Department of Public Health in establishing poison centers under the state and assisted in standardization in health forms for youth organizations in summer camps The Pennsylvania Rural Health Committee published a brochure, "Pennsylvania Rural Physicians—Their Satisfaction With Medical Practice," which will be used in connection with Senior-Junior Day programs and is also available to members of the state society, also prepared a brochure on first aid and home nursing

Council and Advisory Meetings

The Council held two meetings during this period, one in Chicago in September, the other in Grand Rapids, Mich, in February, two Executive Committee meetings, one in Dallas, Tex, and one in Miami Beach, Fla, one joint Advisory-Council meeting held in Chicago In addition, one Executive Committee meeting was held with the Appel Committee of the Board of Trustees, and two special Executive Committee meetings, one in Grand Rapids, and one in Chicago with the Health Committee of the American Farm Bureau Federation

Activities of Advisory Members

Mrs Charles W Sewell, member at large of the Advisory Committee, attended the Annual Meeting of the American Farm Bureau as a representative of the Council, also participated in the Seventh Annual Arkansas Rural Health Conference held in Little Rock, July 30-31 Mr Charles B Shuman, President of the American Farm Bureau Federation, appointed Mr Tom J Hitch, President of the Tennessee Farm Bureau Federation and a member of their Board of Directors, to replace Mr Herbert J Voorhees, deceased, as a member of our Advisory Committee Austin Smith, M D, President of the Pharmaceutical Manufacturers Association, is a new member of the Advisory Committee also The A M A Woman's Auxiliary has appointed Mrs John M Chenault of Decatur, Ala, National Chairman on Rural Health She thus becomes a member of the Council's Advisory Committee, taking the place of Mrs Mason Lawson who has been Liaison Member for several years The Extension Committee on Organization and Policy of the Agricultural Extension Service has appointed Director E J Haslerud of Fargo, N D, to be a member of our Advisory Committee to the Council on Rural Health Director Haslerud takes the place of Mr Marvin Anderson of Iowa who has been serving on this committee for several years Miss Gertrude Humphreys, the other member of the Agricultural Extension Service continues on the committee Mr Shuman also appointed a health committee consisting of Mrs Haven Smith, Chairman, Mr T J Hitch and Mr Harry L Bryson to meet with our Executive Committee for the purpose of outlining an action program on immunization at the state and county level Mrs Charles W Sewell, Mrs Mason Lawson, Mrs Haven Smith, Miss Gertrude Humphreys, Mr T J Hitch Mr Marvin Anderson and Martin P Hines, D V M, participated in the 15th National Conference on Rural Health

Fifteenth National Conference

The 15th National Conference on Rural Health was held in Grand Rapids, Mich, with official registration of 410 persons Eighty-four physicians and 32 states were represented Several important aspects of rural health were reviewed which included panels on medical careers, problems of aging foods and nutrition, and drugs and antibiotics in the feeding of animals It was felt that pertinent problems were presented at this conference and their solution merits the concern of the entire medical profession A M A President-Elect Askey in the banquet address carried out the theme, "Meeting Challenges With Responsibility," and emphasized an activated program in stimulating young people to careers in medicine In order to publicize the National Conference, each Council member addressed a personal letter to all the members of the state rural health committees in their respective regions The annual digest of the 15th National Conference was compiled and approximately 2,000 copies were distributed to state rural health committee members, executive secretaries of state medi-

cal societies, leaders of agricultural and educational groups, and members of both Houses of Congress The Council is grateful to the office and personnel of the state society for their enthusiastic assistance in helping to develop all phases of the conference

Medical Scholarship and Loan Funds and Preceptorship Programs

Medical Scholarship programs aimed at encouraging young physicians to practice in rural areas are being carried on in a number of states For example, the Kentucky State Medical Association reports that since their program was inaugurated in 1946, 188 medical students have been accepted for scholarships, 54 completed medical school and are now practicing in rural areas, and 9 are going into practice this year Other states leading in this program are Ohio with its 12th scholarship, Minnesota with its 8th Illinois, now in its 11th year, has 32 doctors practicing in rural areas as a direct result of this program, with 25 physicians interning, and 42 in medical school Continuing programs on medical scholarship and preceptorship are being carried on in about 22 states In a number of these states this program is under the sponsorship of the state Rural Health Committee as is the Senior-Junior Medical Day programs The Medical Scholarship and Loan Fund brochure is being revised and will be published by the end of the year This has been necessary because of the nation-wide medical careers recruitment program recently launched by the American Medical Association and the Association of American Medical Colleges The Ohio State Medical Association also approved a recommendation that the Woman's Auxiliary place special emphasis on encouraging students in medical careers as a part of its health careers recruitment program

Farm-City Week—For the past five years the Rural Health Committees in numerous states have cooperated in the National Farm-City Week program spear-headed by Kiwanis International

Physician Placement—This continues to be an activity of the rural health committees in a number of states

Council Office

In implementing the Council program staff assumes responsibility for all details in connection with the National Conference, continues, in addition to regular routine duties, to handle special assignments delegated by the Division Director, Chairman, and members of the Council which include attendance at state rural health meetings, annual meetings of national farm groups, inspection trips to various parts of the country in connection with future sites for national and/or regional conferences, and handles all details in connection with Council, Executive, Advisory, and special committee meetings

A roster of state Rural Health Committees was compiled and distributed to chairmen of state rural health committees, executive secretaries, etc Among the general mailings were kits of material for Farm Safety Week furnished by the National Safety Council, and a Progress Report on the Cooperative State-Federal Brucellosis Eradication Program The Council filled individual requests for 500 "Medical Scholarship and Loan Fund" brochures, and there continues to be a constant demand for both the "Family Health Record" and "Personal Health Information Card" as well as the Council's two pamphlets, "Check and Know," and "A Member of the Family—Your Doctor" Fifteen hundred individual requests have been filled for various materials

The Council on Rural Health is grateful to the Board of Trustees, the House of Delegates and the management of the American Medical Association and to the constituent state medical associations and their staffs for the encouragement, support, and cooperation it has received during the past year

Respectfully submitted,
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SAMUEL P LEINBACH, M D
BEN N SALTZMAN, M D
FRANCIS T HOLLAND, M D
W WYAN WASHBURN, M D
REED W FARNSWORTH
CARROLL B ANDREWS, M D
ALLEN T STEWART, M D
NORMAN H GARDNER, M D, Vice Chairman
CARLL S MUNDY, M D, Vice Chairman
F A HUMPHREY, M D, Chairman

COUNCIL ON SCIENTIFIC ASSEMBLY

Council Meetings—The business of the Council was conducted through four regularly scheduled meetings These were held at the Annual and Clinical Meetings of the A M A, at Miami Beach in October with the Section Secretaries, at which time the program for the Annual Meeting was formalized, and in February in Washington, D C with the local chairman and Scientific Program Committee to make preliminary arrangements for the Washington Clinical Meeting In addition, the Executive Committee of the Council met twice, and the other subcommittees were active throughout the year

Meeting with Section Officers—The Council met on three occasions with the Section Secretaries, in Miami Beach, Fla During these meetings, plans for

future Section programs were developed, which included medical subjects to be presented, as well as the outstanding speakers and other program participants, who might be obtained for the programs All participants in the Scientific Program are A M A members or invited guests" who contribute without compensation Physicians from countries, other than the United States, or other special lecture guests, who appear on the program, may be granted an honorarium provided by one of the special Section funds

The Council met with the Representatives of the Scientific Exhibit once during the year at the time of the Annual Meeting in Miami Beach During this meeting, the chairman of the Committee on Awards, announced the names of recipients for the Hektoen and Billings medal awards for the prize-winning scientific exhibits, the Section awards consisting of a certificate of merit and an honorable mention for the best exhibits in each Section, as well as other special awards and commendations

The Council attended two meetings with the Section Delegates at which time matters of mutual interest were discussed

Hershey Conference—The Council was represented at the Hershey Conference by the Chairman, Secretary, and Co-Secretary A report of the Hershey Conference was made to the Council by Dr Edward L Turner, former Director of the Division of Scientific Activities, at a subsequent meeting

Participation of Other Societies and Groups in A M A Meetings—A Committee of the Council was appointed to study combined meetings with specialty groups This Committee reported favorably on such participation and pointed out the excellent relationship which has existed between the Section on Ophthalmology and the Association for Research in Ophthalmology, and the Section on Dermatology and the Society for Investigative Dermatology, Inc Expansion of this activity to include a joint meeting with the American College of Chest Physicians at the Annual Meeting in New York City in 1961 received favorable action by the Council

Admission Restriction—The Committee on Admission Retrictions of the Council approved the recommendation that, as a trial, three mornings be set aside at the Annual Meeting when physicians only would be admitted to the Scientific and Industrial Exhibits It was also recommended that the Industrial Exhibitors give away only those samples or items which the doctor might need while he is attending the meeting The Committee stated that in its opinion more harm than good would be done by restricting doctors' wives, and members of their families studying medicine from attending the A M A meetings

Registration Policies at Annual and Clinical Meetings—The Committee on Registration Policies reiterated the recommendations made by the Council previously that admission to the Annual and Clinical Meetings be by membership or sponsorship by a member only

Distinguished Service Award—In accordance with a request from the Board of Trustees, the Council on Scientific Assembly submitted the names of four outstanding Doctors of Medicine, for consideration for the Distinguished Service Award These names were added to the names previously submitted and held over from the 1959 list of nominees Among the nominees by the Council was the 1960 Distinguished Service Award winner selected by the House of Delegates, Dr Charles A Doan of Columbus, Ohio

Award for Scientific Achievement—The recommendation of the Council for the establishment of an award for Scientific Achievement was accepted by the Board of Trustees and is to be implemented whenever such an award is considered appropriate

Hull Award at Clinical Meetings—The Board of Trustees approved a gold medal and an honorarium of $250 00 to be awarded to the best scientific exhibit at the Clinical Meeting of the A M A in honor of Dr Thomas G Hull, retired Secretary of the Council on Scientific Assembly The award is sponsored by Smith, Kline & French Laboratories, Philadelphia

National Science Fair—A Committee of the Council, composed of Doctors Lincke, Hickam, Newman and McMahon, attended the National Science Fair in Indianapolis, Ind and served as judges Four Science Fair winners were selected for awards by the A M A The two first place winners (one boy and one girl) were invited to present their exhibits in the Scientific Exhibit at the Miami Beach Meeting, where they created considerable interest

Student A M A—A member of the Council, Dr Walter Scott, acting on behalf of the Council, chaired a committee which selected two outstanding award winning exhibits from the Student A M A Meeting in Los Angeles, one in the resident-intern and the other in the student class The two winners were invited and demonstrated their exhibits at the Annual Meeting of the A M A at Miami Beach

Postgraduate Medical Education—The Council, in exploring various media to widely distribute the outstanding scientific programs of the Annual and Clinical Meetings of the A M A initiated a study to determine the costs, feasibility, and desirability of making audiovisual presentations of important new trends in medicine and surgery witnessed through an educational motion picture series or live kinescope television presentations from the actual meetings

Transatlantic Medical Conference With the British Medical Association—The Council approved a request from the British Medical Association for a

Transatlantic Forum on Endocrinology to be held in October, 1960 Dr Gilson Colby Engel, a member of the Council, was appointed representative of the Council and moderator of the group from the United States

Section Use of Color Television —The Section on Orthopedic Surgery utilized the medium of live television to present part of its scientific program at the Miami Beach Meeting This was the initial effort along this line and added another means of providing a diversified scientific program to the audience It also permitted the Section to cover a particular subject more broadly

Instructional Courses on Scientific Subjects —The Council approved the use of instructional courses by the Sections of the Scientific Assembly and the first clinical courses are planned for the New York Meeting in 1961 by the Section on Laryngology, Otology, and Rhinology

Clinical Forums —The Council approved plans for the organization of special clinical forums on subjects of interest to the medical profession in order to present a clinical subject completely All audiovisual media, including exhibits, motion pictures, lectures, television, etc are used to furnish the doctor audience complete coverage of a medical subject

Council Committees —Six committees of the Council were appointed for 1961 as follows

Executive Committee
Scientific Exhibit Committee
Committee on Motion Pictures and Medical Television
Science Fair Committee
Committee on Medical History
Convention Advisory Committee

Theme for A M A Annual Meeting in New York —The Council approved a staff recommendation for a theme for the New York Meeting "Teamwork in Medicine" This theme carries out the efforts being made by the A M A to provide better liaison and cooperation between Doctors of Medicine and those scientists who contribute directly or indirectly to the betterment of health and medicine

Official Program —The official Programs for the Annual and Clinical Meetings were assembled, indexed and edited by the staff The program for the Annual Meeting in Miami Beach contained the titles and abstracts of lectures, exhibits, motion pictures, etc contributed by approximately 2,000 participants, the Clinical Meeting Program contained the titles of lectures, panel discussions, symposia, motion pictures, exhibits, etc by 543 participants

Dallas Clinical Meeting —The Scientific Program presented at the Dallas Clinical Meeting received many favorable comments regarding its outstanding contribution to continuing graduate medical instruction It was very extensive in character with 269 separate presentations of lectures, symposia, panel discussions, color television, motion pictures, breakfast round tables, and scientific exhibits There were 543 participants from 39 different states and the British Isles

The lectures, symposia, panel discussions, and breakfast round tables were all arranged by the local committee on Scientific Program under the chairmanship of Dr Charles D Bussey All programs were exceedingly well organized, presented, and attended The 10 breakfast round tables were filled to capacity, and presented popular medical subjects in an informal and instructive manner The popularity of these conferences will result in their continuance at future meetings

The medical motion pictures were correlated closely with the lectures

The color television program, which originated from Parkland Memorial Hospital, was arranged with meticulous care under the local committee on television, chaired by Dr John S Chapman

The Trans-Atlantic Medical Conference was held with the Glasgow Division of the British Medical Association The American panel was moderated by Dr John S Chapman and his English counterpart was W Arthur Mackey, M B This conference was a distinct success

The Scientific Exhibit contained 120 exhibits, each attended by a competent demonstrator These exhibits were the most popular part of the program, which emphasizes the importance of this means of presenting postgraduate medicine

Several special exhibits were presented The Special Exhibit on Fractures, under the auspices of the Committee on Fractures of which Dr Ralph G Carothers, Cincinnati, was chairman, received a most enthusiastic response and included demonstration on fractures in children, fractures of the elbow and fractures about the ankle Basic principles were stressed and ample opportunity given the audience to ask questions A pamphlet outlining the essential features of the exhibit was distributed

The manikin demonstrations on Problems of Delivery were well attended and clearly indicated their value to the physician in clinical practice Dr Don G Harrel of Dallas was in charge of the demonstrations

The symposium on "Sunlight and the Skin," presented by the Committee on Cosmetics of the American Medical Association in conjunction with an exhibit on the subject, was considered by many as a very timely presentation on an appropriate subject to be presented in the Southwest

Miami Beach Meeting —The 109th Annual Meeting of the American Medical Association at Miami Beach, Fla, presented a program which was eminently successful because of its extremely high quality

From a statistical point of view, there were 410 separate clinical lectures, 22 symposiums, and 12

panel discussions which presented new and recent trends in medicine and surgery There were 314 scientific exhibits, of which 119 had never been shown before at any previous medical meeting Forty seven medical motion pictures were presented, six of which were premiere showings The color television program presented 17 different topics, one of which was used to present part of a Section program for the first time

The Scientific Program represented 198 medical research centers, universities, and hospitals from all parts of the United States, as well as from Canada Of the 2,000 scientists participating in the program, many foreign countries were represented

The General Scientific Meetings opened with the Joseph Goldberger Lecture in Clinical Nutrition which was presented by Dr Richard W Vilter, Cincinnati, and was followed by a symposium on nutrition presented in cooperation with the Council on Foods and Nutrition of the A M A The second General Scientific Meeting was a symposium on Evaluation and Preparation of the Patient for Anesthesia and Surgery,' presented by the Sections on Anesthesiology Diseases of the Chest, General Practice, Internal Medicine, Pathology and Physiology, Pediatrics, and General Surgery These meetings were arranged by the Council on Scientific Assembly, and were presided over by the Chairman of the Council, Dr Lincke, and Doctors McMahon and DeBakey

The 21 Sections of the Scientific Assembly presented excellent programs, many of them combined meetings The Section on Miscellaneous Topics included two half-day sessions, one on Allergy and the other on Aging All of the sections met as scheduled Each section held a business meeting at which time resolutions were submitted and officers were elected

This year, for the first time, the Society for Investigative Dermatology combined its meetings with the Section on Dermatology of the A M A and the results were most gratifying The Society held its meetings all day Monday and Tuesday, and Wednesday mornings, and the Section held its meetings on Tuesday, Wednesday, and Thursday afternoons This method of program coordination has been found to be the most successful means of carrying out a joint endeavor by two medical groups

The Association for Research in Ophthalmology continued its joint meetings with the Section on Ophthalmology, the Association meeting on Monday, Tuesday, Wednesday, and Thursday mornings, and the Section on Tuesday, Wednesday, and Thursday afternoons

The Scientific Exhibit was developed and administered as in past years by the staff, with the cooperation of the Representatives to the Scientific Exhibit There were 546 applications for space in the Scientific Exhibit at Miami Beach of which only 314 could be accepted due to space limitation All exhibits were carefully studied by a group of consultants and considered by the Scientific Exhibit Committee who made the final selections

The Special Exhibit on Fractures, presented under the Committee on Fractures of which Dr Ralph G Carothers was chairman, was again an outstanding success

The Special Exhibit on Fresh Tissue Pathology was sponsored by the Section on Pathology and Physiology, with Dr Philip R Rezek, Miami, Fla, as chairman

The Special Exhibit on Pulmonary Function was sponsored by the Section on Diseases of the Chest, under the auspices of a committee of which Dr George R Meneely, Nashville, Tenn, was chairman

Physical Examinations for Physicians were presented by the Section on General Practice with the cooperation of the American Academy of General Practice, American College of Cardiology, National Heart Institute, National Tuberculosis Association, National Society for the Prevention of Blindness, and Subcommittee on Noise of the Committee on Conservation of Hearing, American Academy of Ophthalmology and Otolaryngology, under the auspices of a committee of which Dr Charles E McArthur, Olympia, Wash, was chairman Assistance was also provided by the Burdick Corporation with electrocardiographic equipment and the General Electric Company X-ray Department, for x-ray equipment featuring reduced radiation to the patient The examinations included electrocardiograms, chest x-rays, intraocular tension tests, and audiograms Over 1,500 physicians availed themselves of the opportunity to have some part of the physical examination accomplished By mid-morning on Friday, 1,008 chest x-rays had been taken At close of work on Thursday, 377 films had been read with the following findings

38 with apical scarring
5 with more extensive old tuberculosis
1 with far advanced active tuberculosis
1 with pleural effusion (1,500 cc of blood tinged fluid removed at a local hospital, symptoms suggestive of pulmonary infarction)
9 with nodules (uncalcified)
20 with various pulmonary abnormalities, i e, pneumothorax, lobectomy, congenital anomalies, etc
24 with basal scars of infiltrations
28 with definite cardiac abnormalities

Thirteen-hundred and twenty-eight (1,328) electrocardiograms were taken, not counting repeats or Master two-step tests This number is unusually high, and runs to about 16% of the total physician registration

By mid-morning on Friday, 734 doctors were given eye examinations for glaucoma Thirty-five, or 4 7%, were referred for ophthalmological examination because of elevation of ocular tension

By Thursday night, 784 doctors had been given an audiometric examination

The Special Exhibit and Clinical Forum on Body Fluid Disturbances was presented for the first time at the Miami Beach Meeting under the auspices of a committee of which Dr William D Snively, Jr, Evansville, Ind, was chairman This forum covered a complete two-day lecture series and demonstrations covering the subject of body fluids and was an outstanding success Approximately 800 persons registered for the forum, and there were 1,800 requests for the material presented at the meeting

An Exhibit Symposium on Arthritis and Rheumatism was presented by a committee of which Dr John W Sigler, Detroit, was chairman, in cooperation with the American Rheumatism Association and the Arthritis and Rheumatism Foundation In addition to an excellent group of exhibits, a consultation booth was available where physicians could discuss problems regarding their patients afflicted with these diseases

Fifty-three exhibits received awards, consisting of 6 medals, 25 certificates of merit, and 23 honorable mentions In addition, two certificates of merit and two honorable mentions were presented for medical illustration and medical photography The Chairman of the Committee on Awards was Dr Frank W Konzelmann, Somers Point, N J In addition, the Section on Urology presented the John H Morrissey award, and the Section on Ophthalmology an award of $250 00

During the meeting, the Council visited each exhibit and attended a large number of the Section programs, color television and motion picture programs, as well as the General Scientific Meetings

The Council members were extremely active during the meeting, participating in numerous press and radio conferences, television presentations, and the production of "Medifilm Report II of the Meeting" In addition, some of the members had additional duties as delegates

The Council on Scientific Assembly wishes to express its appreciation to all of the participants on the scientific program, as well as to the Section officers and special committees, and the officers of the Society for Investigative Dermatology and the Association for Research in Ophthalmology

Future Plans —The Council on Scientific Assembly is constantly exploring the best ways and means of providing postgraduate clinical medicine to A M A members on a continuing basis through coordinated scientific programs

The Council is utilizing all new methods of program development to bring to the A M A Annual and Clinical Meetings a completely coordinated program which will fit the desires and needs of the greatest number of its membership as possible Special clinical forums, postgraduate courses of instruction on clinical subjects, and audience participation conferences are being emphasized All possible means of communication are being developed, including broad coverage of special subjects or detailed coverage of general subjects Since many members are not able to attend either or both meetings, a means of carrying the meetings to the Members is also being studied

Acknowledgements —Excellent interdepartmental staff relations continued throughout the year and the Council on Scientific Assembly and the staff of the Department of Scientific Assembly wish to express appreciation for the fine cooperation afforded by the other departments and divisions

Respectfully submitted,
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M E DeBakey, M D
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L E Farr, M D
H B Hickam, M D
A McMahon, M D
S P Newman, M D
W Scott, M D
C A Lincke, M D, Chairman
C H Bramlitt, M D, Secretary

COMMITTEE ON COSMETICS

This year has been outstanding for excellent coverage in the lay press of the Committee's activities Committee-sponsored reports, exhibits, and symposia are intended primarily to serve in the continuing education of the physician However, scientists in areas allied to medicine report they have been enlightened and stimulated by the Committee's educational activities

This year the Committee experimented with the use of a central theme for a concentrated educational effort The topic "Sunlight and the Skin" was selected because of the increasing tendency to de-emphasize adverse reactions to exposure to the sun With this topic as the basis, a symposium, an exhibit, and a pamphlet were planned The Committee's fifth symposium "Sunlight and the Skin" was presented at the A M A's clinical Meeting in Dallas, Dec 2, 1959

An exhibit "Sunlight and the Skin" was prepared by the Committee to supplement the symposium This is a self-contained exhibit which describes physical exposure factors, physiological and pathological reactions to the sun's rays Illustrations include conditions caused, provoked, and aggravated by the ultraviolet rays An 11-page pamphlet which discusses in detail the subject of the exhibit was written for distribution to exhibit viewers

The foregoing symposium was selected as the basis for one of a series of television reports entitled *Ask Your Doctor* presented by Merck, Sharpe and Dohme The 30 minute program was entitled The Other Side of the Sun" Drs J B Howell, Rudolph L Baer and Harold F Blum were the participants The *Today's Health* Editorial Staff excerpted material from this program to form the basis of an article published in the July issue

The Committee's sixth symposium was planned for presentation before the Pharmacy Section of the American Association for the Advancement of Science on Dec 29, 1960 This symposium is entitled The Scientist s Contribution to the Safe Use of Cosmetics"

The Committee communicates with the medical profession most frequently through published reports in THE JOURNAL The following reports were published during the past year Dermabrasion for the Improvement of Acne Scars, Surgical Approach to Facial Scarring," The Cosmetic Management of Nevi and Pigmentary Disturbances, Diagnosis and Management of Hirsutism,' Photobiological Research with Particular Reference to Skin," Physiological and Pathological Changes in Skin from Sunburn and Suntan,' and Use and Abuse of the Psoralens A report entitled Management of Angiomas" will be published in the near future

The Committee s exhibit Sunlight and the Skin' was shown at the Industrial Health Conference in Rochester, the Illinois Medical Society in Chicago, and A M A meetings in Dallas and Miami Plans have been completed for its presentation at the American Public Health Association in San Francisco and the American Academy of Dermatology and Syphilology in Chicago

Individual Committee members have continued to demonstrate an interest in increased cooperation with the toilet goods industry towards the goal of providing the public with safe and effective products They have actively participated in and assisted with the meetings, programs and seminars sponsored by industry scientists Drs Raymond Suskind and Irvin Blank served as co-chairmen of a recent two-day seminar of the Society of Cosmetic Chemists

There has been a notable increase in the number of requests by the public and the press for opinions on questions of current interest in the area of cosmetics and the skin Science writers, beauty editors, reporters, book authors, and others who prepare material primarily for lay distribution contacted the Committee office more often than in past years for opinions and information

Respectfully submitted,
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RAYMOND R SUSKIND, M D
LOUIS C ZOPF, Sc D
STEPHEN ROTHMAN, M D , Chairman
VERONICA L CONLEY, Ph D , Secretary

COMMITTEE ON THE MEDICAL ASPECTS OF SPORTS

The Committee on the Medical Aspects of Sports of the American Medical Association (formerly the ad hoc Committee on Injuries in Sports) is now a standing Committee of the Board of Trustees It was first appointed at the suggestion of various athletic groups in 1956 The new name of this Committee is a reflection of its broader interest and desire for positive approaches

The chief purposes of the Committee are (1) to advise athletic personnel on the various phases of the health supervision of sports, and (2) to disseminate information to interested physicians on the application of medical skills in the athletic situation To implement these objectives, the Committee has carried on a variety of activities

The Committee maintains its liaison with the Committee on Injury and Safety in Sports of the National Collegiate Athletic Association through the inclusion on this Committee of one of the members of the A M A Committee on the Medical Aspects of Sports (at the present time Dr Allan Ryan Chairman of the A M A Committee holds this liaison membership)

The Committee continues cooperative publication of its monthly article on some health aspect of athletics in the *Press*, the bulletin of the National Federation of State High School Athletic Associations Articles cover such subjects as Sanitation in Sports, Conditioning for the Athlete, Smoking and Sports, Comments on Colds, Immunization and the Athlete, and First Aid for the Athlete

The First National Conference on the Medical Aspects of Sports, sponsored by the A M A under the auspices of the Committee, was held on Nov 30, 1959, in conjunction with the Clinical Meeting of the Association at Dallas, Tex Some 200 participants including athletic personnel as well as interested physicians attended the Conference The Second National Conference on the same subject has been authorized and scheduled for Nov 27, 1960, at Washington, D C, immediately prior to the Clinical Meeting there Nov 28-Dec 1, 1960

In conjunction with the A M A's Council on Mental Health, the Committee issued a statement on hypnosis in athletics in response to inquiries as to medical attitudes on this issue In substance the report stated that for reasons of sportsmanship, as well as possible health hazards, hypnosis for the purpose of improving athletic performance is undesirable There may be instances, however, when

Report of The Executive Vice President

The renovation and the air conditioning of the headquarters building, begun in 1959, were completed The reorganization of divisions and departments continued and at the end of this reporting period, had reached relative stabilization

The overriding preoccupation of this office was the legislative struggle involving Forand-type bills

Office—The research abstractor was transferred to the Division of Scientific Publications where she became the Director of the Library

Oliver Kendall, previously Assistant to the Business Manager, was transferred to this office as Administrative Assistant to the Executive Vice President

Pension Plan—A new pension plan for employees comparing favorably with the better pension plans in industry, was adopted by the Board of Trustees It materially improves the financial status of AMA employees

Doctor Hull—Dr Thomas G Hull retired in January 1960 after many years as Director of the Scientific Assembly Department of the Association

Doctor Talbott—A new Director of the Division of Scientific Publications was appointed in October, 1959 Dr John H Talbott, formerly Professor of Medicine at the University of Buffalo Medical School, became Director of the Division and Editor of *JAMA*

Dr Edward L Turner—During this period Doctor Turner died suddenly His death was a blow to the development of the Division of Scientific Activities of which he had been Director After his death, the Assistant Executive Vice President, Dr Ernest B Howard, acted as Director of the Division pending the appointment of Doctor Turner's successor

New Divisions—The Division of Socio-Economic Activities was divided into a new Division of Environmental Medicine of which Dr Franklin Yoder was appointed Director, and a new Division of Legal and Socio-Economic Activities, of which Mr C Joseph Stetler, formerly Director of the old Law Division became director

Forand Campaign—Dr E B Howard, Assistant Executive Vice President, directed the special staff task force that was set up to plan and conduct staff functions in connection with the Forand campaign

Reference to this campaign is made in the reports of the Communications Division, Division of Legal and Socio-Economic Activities, Field Service Division, and the Washington Office

The course of this legislation was favorable to American medicine It ended in the post-convention Session of the Congress in August 1960 when a Kennedy-Forand type Amendment was defeated on the Floor of the Senate by a vote of 51 to 44

BUSINESS DIVISION

The Business Division serves a dual purpose of providing accounting, personnel, building, and operating services to all of the Divisions at A M A headquarters, and also is responsible for membership records, the circulation of A M A publications, their production, and the sale of advertising It is made up of eight separate departments

- Building Services Department, John T Brian, Director
- Personnel Department, W W Bolton, M D, Director
- Accounting Department, Joseph E Hartigan, Director
- Operating Services Department, David F Kanyer, Director
- Convention Services Department, George B Larson, Director
- Contract Printing Department, T V McDavitt, Director
- Advertising Department, John L Murphy, Director
- Circulation and Records Department, Robert A Enlow, Director

Building Program—The remodeling of the American Medical Association headquarters building is now complete Modern office facilities, geared to meet the needs of our operation, have materially contributed to increased effectiveness In the course of this program, the American Medical Association has invested $2,302,411 00 in the property it owns at 535 North Dearborn Street in Chicago This represents an investment of approximately $10 00 per square foot of office space, and when added to previous investments in the building, produces a current depreciated value of $15 00 per square foot Current appraisals indicate that it would require an investment of between $25 00 or $30 00 per square foot to replace this facility

Personnel Department—During the course of this year, Dr William W Bolton was made Director of the Personnel Department, and Medical Director for headquarter's personnel In addition to their normal service functions, this department has participated in a revision of the employees' Pension Program

Accounting Department—On Jan 1, 1959, a revised accounting and budget system was put into

operation by the Accounting Department This system has been in operation since that time, and has materially improved the flow of financial information to the Executive Vice President's Office and to the Board of Trustees

Operating Services Department—This department continues to service all of the other departments and divisions in the areas of reproduction, job printing, handling of mail, purchasing, the operation of the switchboard and the reception centers

Convention Services Department—This department has continued to survey sites for the Annual and Clinical Meetings, and to handle all of the negotiations for the many facilities and services necessary to the conduct of these meetings It also handles transportation for all departments and divisions of the American Medical Association

Contract Printing Department—The Association continues to purchase all of its printing from outside sources At present, the printing production of our regular publications are handled as follows THE JOURNAL of the A M A, McCall Corporation of Dayton, Ohio, *Today's Health* and the specialty journals, Baird-Ward Printing Company of Nashville, Tenn, *The AMA News*, Perry Printing Company of Waterloo, Wis

Advertising Department—In August, 1959, John L Murphy, formerly manager of our eastern sales office, was made Director of the Advertising Department This department continues to represent the American Medical Association in the sale of advertising in all publications

A M A MEMBERSHIP REPORT JUNE 30 1960

Constituent Society	Active Dues Paying Members	Active Dues Exempt Members	Total Active Members	Associate Dues-Exempt Members	Total Of All Members	Total Licensed Physicians Residing In State
Alabama	1 597	296	1 893		1,893	2,478
Alaska	82	6	88	2	90	114
Arizona	954	36	990	54	1 044	1,279
Arkansas	976	105	1 081		1,081	1,642
California	16,182	668	16 850	1,509	18,359	24,677
Colorado	1,775	282	2,057	379	2,436	2,692
Connecticut	2,397	158	2 555		2,555	4,220
Delaware	350	39	389		389	529
Dist of Columbia	1,149	92	1 241	189	1,430	2,507
Florida	3,409	187	3,596	79	3,675	5,996
Georgia	2,287	363	2 650	27	2,677	3 592
Hawaii	445	23	468	14	482	671
Idaho	471	6	477		477	579
Illinois	9,379	999	10,378		10,378	12 848
Indiana	3 441	680	4,121		4 121	4,540
Iowa	2,058	287	2 345	41	2,386	2,782
Isthmian C Z	21	19	40		40	87
Kansas	1 355	221	1 576	3	1 579	2 210
Kentucky	1,803	71	1,874	75	1,949	2,666
Louisiana	1,966	9	1,975	70	2,045	3,637
Maine	569	109	678	4	682	959
Maryland	1,748	382	2,130	258	2,388	4,252
Massachusetts	4,535	558	5,093	61	5,154	9,114
Michigan	5,627	415	6,042	356	6,398	8,641
Minnesota	3,047	342	3,389	144	3,533	4,586
Mississippi	1,140	189	1,329	5	1,334	1,675
Missouri	3,021	417	3,438		3,438	4,946
Montana	520	27	547	46	593	641
Nebraska	1,142	25	1,167	98	1,265	1,526
Nevada	227	5	232		232	289
New Hampshire	453	39	492	6	498	786
New Jersey	5,381	261	5,642	364	6,006	7,395
New Mexico	523	40	563		563	739
New York	17,212	110	17,322	1,137	18 459	31,910
North Carolina	2,698	191	2,889		2,889	4,198
North Dakota	412	29	441		441	496
Ohio	7,802	565	8,367		8,367	11,470
Oklahoma	1,570	172	1,742	89	1,831	2,246
Oregon	1,348	168	1,516	255	1 771	2,290
Pennsylvania	10,457	306	10,763	969	11,732	14,862
Puerto Rico	236		236		236	1,238
Rhode Island	716	83	799		799	1,097
South Carolina	1,127	122	1,249	6	1,255	1,863
South Dakota	360	38	398	1	399	479
Tennessee	2,377	201	2,578	42	2,620	3,730
Texas	6,863	495	7,358	262	7,620	9,524
Utah	797	51	848		848	1 134
Vermont	353	40	393		393	580
Virgin Islands	18		18		18	27
Virginia	1 811	265	2,076	12	2,088	4,009
Washington	2,616	267	2,883	3	2,886	3,604
West Virginia	1,309	147	1,456		1,456	1,649
Wisconsin	3,025	353	3,378	172	3,550	4,129
Wyoming	241	9	250		250	281
In Transfer (direct)	50		50		50	
Address being changed						1,545
TOTAL IN U S & POSS	143 428	10,968	154,396	6,732	161,128	227,656
U S Army		4 016	4,016		4,016	4 035
U S Navy		3 587	3 587		3,587	3,593
U S Air Force		3,822	3,822		3,822	3,832
U S P H S		1,699	1,699		1,699	1 732
U S Vet Admin		3,849	3,849		3 849	4,089
U S Government Retired		863	863		863	(in state)
TOTAL SERVICE MEMBERS		17 836	17,836		17,836	17,281
Affiliate Members					283	
Honorary Members					86	
TOTAL ALL CLASSIFICATIONS	143,428	28,804	172,232	6,732	179,333	244,937

Circulation and Records Department

Membership in the A M A increased by 2,896 during the fiscal year July 1, 1959, through June 30, 1960 A breakdown of A M A membership as of June 30, 1960, follows

Reported Through Constituent Societies

	As of June 30, 1960	As of June 30, 1959
Active members dues paid	143,428	140,167
Active members exempt from dues	10,968	10,811
Associate members exempt from dues	6,732	6,439
Reported Direct		
Service members exempt from dues	17,836	18,654
Affiliate members exempt from dues	283	278
Honorary members exempt from dues	86	88
Total membership on June 30	179,333	176,437

The next table shows the number of physician members of constituent medical associations who also hold membership in the American Medical Association For reference, the total number of physicians currently residing in the state is also indicated The apportionment of the delegates to the A M A House of Delegates is based on the membership as recorded on December 31 of each calendar year, and this should not be confused with the following June 30 report

The distribution of all A M A publications continued to rise, and as of June 30, 1960, reached the following levels

The *Journal of the American Medical Association* (weekly)	184,364
SPECIALTY JOURNALS (monthlies)	
American Journal of Diseases of Children	26,429
Archives of Dermatology	12,293
Archives of Environmental Health	7,526
Archives of General Psychiatry	16,145
Archives of Internal Medicine	62,084
Archives of Neurology	8,856
Archives of Ophthalmology	11,706
Archives of Otolaryngology	9,388
Archives of Pathology	10,763
Archives of Surgery	44,945
A M A News (bi-weekly)	267,238
Today's Health (monthly)	805,514
American Medical Directory, 20th Edition (bi-ennially)	17,662

COMMUNICATIONS DIVISION

The period covered by this report is July 1, 1959, to June 30, 1960

These 12 months marked the first full year of operation for the Communications Division as created under the Association's reorganization plan In the latter part of the period, the administrative activities of the American Medical Education Foundation were placed under the supervision of this Division

Through expanded, coordinated efforts, the Division sought to inform both the public and physicians of the constructive policies and activities carried out by the American Medical Association and the medical profession as a whole To help further that objective, the Division Director made extensive recommendations to the Executive Vice President regarding ways and means of improving the so-called "public image" of the Association

The Association embarked on its first advertising campaign in more than 10 years—a series of 13 full-page ads, directed at journalists, in *Editor and Publisher* magazine

Advisory Committee—Valuable counsel was received from the Advisory Committee to the Director of the Communications Division, which met four times Members of the committee were

Mr Ed Clancy, Chairman
Director of Public Relations, California Medical Association
Mr Harold Brunn
Executive Secretary, Minnesota State Medical Association
Mr John Foster
Executive Secretary, South Dakota State Medical Association
Mr Joseph Gordon
Executive Secretary, Hartford County (Conn) Medical Association
Mr Robert Howard
Executive Secretary, Medical Society of Virginia
Mr Milton Krueger
Executive Secretary, Medical Association of Georgia
Mr J P Sanford
Executive Secretary, Kentucky State Medical Association
Mr John Sargeant
Executive Secretary, Medical and Chirurgical Faculty of Maryland
Mr C Lincoln Williston
Executive Secretary, Texas Medical Association

DEPARTMENT OF MEDIA RELATIONS

Press Relations Section

General Services—The A M A weekly news release was distributed to 3,000 newspapers, radio and television stations, and special writers In addition, approximately 50 special news releases were issued on a variety of subjects, including health care for the aged Requests for additional information averaged 15 per week

Annual and Clinical Meetings—Press room registrations totalled 183 at the Miami Beach Annual Meeting and 56 at the Dallas Clinical Meeting

During the Miami Beach meeting newsmen filed 150,000 words via Western Union and approximately the same number (estimated) by telephone, letter, and special wires

Special Meetings—The Press Section provided advance publicity, press room services, and follow-up informational activities for 22 special conferences and meetings sponsored by the Association, including eight regional conferences on aging In connection with the latter, the section prepared more than 100 news releases and arranged numerous press conferences and special interviews The staff also assisted with publicity for meetings sponsored by the National Health Council and the World Medical Association

Magazine Relations Section

Continuing Services—This section handled more than 250 requests for assistance from magazine writers and editors Some 64 manuscripts were reviewed for accuracy prior to publication in mass circulation consumer magazines Articles summarized for the Magazine Report section of J A M A totaled 312 Only a handful of the 220 medical articles appearing in magazines with one million or more circulation could be considered unfavorable to medicine, and in two cases the section was able to modify the original articles

Special Activities—In addition to meeting requests by magazine writers and editors, this section put greater emphasis on taking the initiative in placing and suggesting magazine materials Among the tangible results were a *Look* article on the foreign residency program, three *Good Housekeeping* articles on hypnosis, reducing drugs, and vitamins, two *Family Circle* pieces on sunburn and dental decay, and statements by A M A officials which were incorporated in articles used by *Parade, Good Housekeeping, Redbook, Reader's Digest, Together, Ladies' Home Journal* and *Better Homes and Gardens* The section also assisted *Parents* magazine in plans for a special health issue and worked with *Life* magazine for more than two months in preparations for the fall, 1959, series on the American doctor

Exhibit Section

Distribution—AMA exhibits were shown 343 times in 36 states for a total of 1,571 show days before public meetings, state and county fairs, allied health groups, health fairs and state society annual meetings The section assisted four local societies in the planning and staging of health fairs and gave counsel to other groups which plan future fairs

New Exhibits—Twenty-five new units were added to the library, including exhibits on aging, health care of the athlete, history of medical education, sunlight and the skin, health appraisal of the school child, fitness, seat belt safety, alcoholism, teenage nutrition, and medicine as a career A major project was development of the Transparent Twins exhibit on the human body This unit, only one of its kind built in the United States, will be used at larger health fairs around the country

Radio-Television-Motion Picture Section

News and Public Affairs—With the addition of another full-time staff man, this section increased its activities in the area of news and public affairs broadcasting Assistance was given to all of the radio and TV networks, individual programs such as "World Wide '60," "Monitor," Today," "Open End," 'Houseparty," "CBS Reports," and "National Farm and Home Hour," producing companies and sponsors Among the subjects covered were the cost of medical care, aging, narcotic addiction, alcoholism, hypnosis, family living, and rural health The Association cooperated with Smith, Kline & French Laboratories in presenting the 1960 "March of Medicine" show, "MD, USA," over the NBC television network, and with Lederle Laboratories in a series of 13 programs over the ABC radio network

A M A Meetings—The section arranged and assisted in numerous radio and TV programs emanating from the Association's Annual and Clinical Meetings and special conferences These included an hour-long pickup from the Miami Beach meeting by the "Today' show, a series of programs presented at Dallas and Miami Beach in cooperation with Merck, Sharp, and Dohme, two TV news clips distributed nationally from Dallas on the General Practitioner of the Year, an excerpt from Dr E Vincent Askey's Miami Beach inaugural address distributed to 166 radio and 300 television stations, and daily meeting reports provided in Miami Beach to the Mutual Broadcasting System

Radio Transcriptions—Production was completed on "Medical Milestones," a series of 39 five-minute vignettes on the history of medicine, which was used by approximately 1,700 radio stations throughout the United States

PR Films—Showings of A M A public relations films totaled 14,847, including 517 telecasts The new medical careers film, 'I Am a Doctor," won three awards for excellence

Advisory Committee—Now in its fifth year of operation, the Physicians Advisory Committee on Television, Radio, and Motion Pictures continued its active liaison work with New York and Los Angeles network contacts and producers Close contact was maintained with such programs as Perry Mason," 'Playhouse 90," "The Donna Reed Show," 'The Loretta Young Show, General Electric Theater," Goodyear Playhouse,' and "Diagnosis Unknown Current committee members are (California)

Eugene Hoffman, M D , Co-Chairman
Dudley M Cobb, M D
Robert W Gentry, M D

Richard O Myers, M D
Marcus H Rabwin, M D
James F Regan, M D
Charles C Stehly, M D
Edward T Tyler, M D
(New York)
Gerald D Dorman, M D, Co-Chairman
Renato J Azzari, M D
Henry I Fineberg, M D

DEPARTMENT OF PROGRAM DEVELOPMENT

Health Care of the Aged

This department's major responsibility, in close cooperation with various other A M A units, was development of an informational and educational program on health care of the aged Aimed at the profession, the public, and the United States Congress, this program included the following activities and materials

Kits of editorials, factsheets, and literature, distributed to editors and chief editorial writers of major newspapers

A special kit of materials, "Aging—A Community Responsibility," sent to all state and county medical societies to help them organize professional and community education programs

Assistance to medical societies in preparations for the seven regional hearings of the McNamara Committee on the Forand Bill (H R 4700)

Preparation of testimony for A M A officials appearing before the House Ways and Means Committee, Senate Finance Committee, and Senate Subcommittee on Problems of the Aged and Aging

Distribution of factsheets to selected media writers and members of Congress at strategic times during the year

Preparation of testimony and literature explaining the Association's support of Title VI of H R 12580 (Mills Bill)

Publication of pamphlets entitled "What You Should Know About the Forand Bill," "Political Medicine Is Bad Medicine," "Stay Young, Think Young," and "Facts About the Forand Bill"

Medical Careers—Continuing the program to recruit talented young people into the study of medicine, the department distributed 12,000 career guidance kits primarily to state guidance teachers and their staffs, and members of the National Vocational Guidance, American School Counselors, and American College Personnel Associations The A M A again participated in the National Science Fair and was co-host for 1,000 high school students at a Health Awards Banquet Winners of the top two A M A awards were guests at the Miami Beach meeting

Miscellaneous Services—In carrying out a wide variety of services to other Association departments and councils, staff members also coordinated photographic coverage of Annual and Clinical and special meetings published "The Story of America's Medical Schools" for the Second World Congress on Medical Education created promotional campaigns to increase attendance at the Association's Annual and Clinical Meetings produced the General Program for the Annual Meeting worked with Kiwanis International in promoting Farm-City Week worked with the Council on Foods and Nutrition in its food faddism campaign and promotion of several symposia

DEPARTMENT OF SERVICES TO OFFICERS

Speeches—The four staff writers assisted in the preparation of 146 speeches for the A M A president, president-elect, trustees, and other officers This is more than a 60 per cent increase over the output of 88 speeches in the preceding year Scores of them were reprinted in state and county journals, specialty journals, and publications of service clubs, civic organizations, and the insurance industry

Articles—Assistance was given in the preparation of 23 articles and statements, including material for the *J A M A* President's Page and publications of allied health groups The Iowa State Medical Society reprinted 2,500 copies of Dr Louis M Orr's January President's Page on expansion and recruitment in medical education

Additional Services—Department staff members also covered and reported on two Forand Bill rallies wrote the report on House of Delegates actions at the Annual and Clinical Meetings (1,100 copies mailed directly from meeting cities handled arrangements, scripting, and promotion of presidential inaugural ceremony at Annual Meeting edited *Daily Bulletin* provided press assistance to the president and president-elect on 21 occasions in 19 cities outside Chicago, Dallas, and Miami Beach, and wrote 25 news releases on speeches assisted the president and president-elect in arranging and coordinating itineraries stepped up a program to get A M A leaders before more lay groups

DEPARTMENT OF SPECIAL SERVICES

State and County Services—In helping state and county medical societies to improve their public relations program, this department published six issues of the bimonthly *PR Doctor* newsletter, which with a new editor and new format increased its circulation to 5,800 arranged the 1959 PR Institute, which attracted over 375 persons, and distributed follow-up summary releases, photo brochures, and speech texts and prepared special materials including the annual *PR Doctor* index, "PR At Your Fingertips" (a detailed listing of all aids available from the A M A), and a new PR kit on building medical society meeting attendance Extensive revision was begun on the 1954 County PR Manual, slated for reprinting in late 1960

Literature—The department either produced or completed copy on new pieces entitled "AMA Looks Ahead to Better Health," Let's Use, Not Abuse Health Insurance,' The Cost of Medical Care,' "Unlocking Community Resources' (a manual on aging programs) and "AMA—Heart of the Nation's Health Efforts' distributed well over 2,000,000 copies of major items added a literature counsellor to the staff and counseled other Association departments on the production and promotion of 26 different projects

A M A Promotions—The department provided editorial assistance to the Membership Department in various informational projects filled numerous requests for information, speeches and articles about A M A activities handled the guided tour program at Chicago headquarters, including training and refresher courses for junior and senior guides, a new tour outline and a slide-script (visitors totaled 184)

Women's Activities—For the A M A Woman's Auxiliary the services included editorial assistance on two booklets and full-time press room staffing at the Auxiliary's annual meeting in Miami Beach For the American Association of Medical Assistants this department developed a script outline and promotional materials on a public relations film produced by Wyeth Laboratories prepared monthly educational news releases for medical assistants bulletins gave press relations help to the AAMA national office in Chicago distributed Forand Bill packets to local medical assistants groups provided speakers for numerous meetings of medical assistants and cooperated in the development and distribution of various educational materials Program planning help also was given to the General Federation of Women's Clubs, the Business and Professional Women's Clubs, and the American Nurses Association

Miscellaneous Activities—Other responsibilities included evaluation of all A M A pamphlets, public relations tips for *AMA News*, materials for the anti-polio campaign, evaluation of a nationwide public opinion survey of medicine, service on the Daily Bulletin at Annual and Clinical Meetings and arrangements for the president's reception and ball at the Annual Meeting

DEPARTMENT OF MEDICAL MOTION PICTURES AND TELEVISION

Annual and Clinical Meetings—The Dallas program of 27 films, including two premiere showings, drew an attendance of 2,683 One of the new films was 'Rehabilitation Adds Life to Years, prepared by the A M A Committee on Rehabilitation A program of 21 health films also was arranged for the Dallas Health Fair held in conjunction with the Clinical Meeting The Miami Beach program of 47 films two film symposia and six premiere showings attracted an attendance of 6,034 Literature distribution totaled 1,175 pieces, and there were 168 requests for additional publications

New Films—The department coordinated production on five films on the subjects of patient rehabilitation for the general practitioner, health supervision of children, chemical tests for intoxication, disability determinations, and highlights of the scientific program at the Dallas Clinical Meeting The latter film, viewed by 217 medical audiences, was publicized through 3,000 letters and brochures sent to state and county medical societies and hospital staffs

Bookings, Reviews, and Catalogs—The film library booked a total of 8,841 showings, an increase of 2,246 over the previous period It added 141 prints on 51 new subjects, bringing the total to 1,116 prints on 253 subjects Sixty-one film reviews and two illustrated reviews were published in the *J A M A* and all reviews appearing in the J A M A during 1959 were reprinted in booklet form for distribution Completely revised were the film library catalog and the publication dealing with sources of medical motion pictures

International Activities—The department planned and presented programs for the Second World Conference on Medical Education and the 1959 meeting of the World Medical Association, selected films for showings at the 1959 Edinburgh Film Festival and at medical schools in Glasgow and London, assisted in the planning of an international film exhibition at the 1960 meeting of the World Medical Association in Berlin, and met both here and abroad with representatives of numerous foreign medical organizations concerning their medical motion picture and television activities

TODAY'S HEALTH

Circulation and Printing—Monthly circulation of *Today's Health* reached an all-time high of more than 830,000 copies, placing it in the "major magazine category of *Sports Illustrated, Esquire,* and *Living for Young Homemakers* With the magazine now appearing in 140,000 physicians waiting rooms, it is available to an estimated 40 million Americans each month To reduce production costs by an estimated $100,000 per year, printing facilities were transferred from McCall's Corporation, Dayton, Ohio, to Baird-Ward Company, Nashville, Tenn Page size also was altered slightly to effect greater economy in the use of paper

Format and Content—Four-color covers and illustrations, new makeup and other techniques were employed to improve physical appearance and readability Magazine size was increased from 72 to 88 pages in order to attract more advertising and allow greater variety of subject matter Editorial format was revised so that each issue now contains at least one article in the areas of general medicine,

child development, nutrition, travel and recreation, and safety and first aid Whenever possible, each issue also carries articles on health-related community problems, health education, prominent men of medicine, and lay personalities with a health message for the public New question-and-answer columns were established on nutrition and child development

Reprints and Awards —*Reader's Digest* reprinted five complete articles and numerous news excerpts Three articles in *Today's Health* were nominated for excellence in science writing awards in competitions sponsored by the Arthritis and Rheumatism Foundation and the American Heart Association A citation was received from the American Cancer Society, and the Muscular Dystrophy Association reprinted a series chapter for national distribution as part of its public education campaign New York University and the Columbia and Texas University schools of journalism began using *Today's Health* as a teaching aid in magazine editing courses

THE AMA NEWS

Circulation —Newest of the Association's publications, *AMA News*, in only its second year of existence reached a June 30, 1960, circulation of 269,568—more than any other medical publication aimed at physicians Many issues during the year were "sold out" of advertising space

Readership —A readership survey showed that almost 90 per cent of America's physicians read *AMA News* regularly and more than 78 per cent found it useful in their practice Physician interest was reflected in more than 6,000 letters received from doctors Various A M A departments and other allied health organizations reported excellent response to stories mentioning such things as new films, pamphlets, services and activities

Quotes and Reprints —*AMA News* material—news stories, feature articles, editorials, cartoons, and charts—was widely quoted or reprinted by hundreds of newspapers, state and county medical journals, health publications, trade papers, chamber of commerce bulletins, farm journals, science and military publications, magazines, insurance bulletins, pharmaceutical periodicals, university publications, syndicated columns, press associations, radio and TV networks, industries, organizations, the Congressional Record, and U S Senate committees

AMERICAN MEDICAL EDUCATION FOUNDATION

Contributions —The Foundation continued its growth both in the number of contributors and amount contributed toward the financial aid of the nation's 85 medical schools As of Jan 31, 1960, the total sum contributed since 1951 had reached $9,074,553 Contributions for 1959 reached a record-breaking $1,198,335 More than $175,000 of this was contributed by the A M A's Woman's Auxiliary During the first half of 1960 the total, since 1951, had reached $9,369,862 The number of contributors jumped in 1959 from 49,729 to 55,527

Steady Growth —The figures for the first six months of 1960 indicate that this year will see a sizable increase in the amount of contributions This steady growth of support by organized medicine reflects its growing awareness of the necessity for private aid to the nation's medical schools Increased activity during the year in state after state is an even more graphic example of this awareness Together with the growth of support for AMEF is a similar increase in contributions direct to the schools Many physicians who first contributed to AMEF now report that they have responded to a direct appeal from their schools as well Altogether, American medicine is responding to its obligation in a more significant manner each year

Distribution —The total amount of the 1959 grants distributed to the medical schools was $1,198,287 Of this, $789,514 was specifically designated by donors for their schools The remaining $408,773 was distributed in equal grants of $4,925 for four-year schools, and $2,462 for two-year schools of basic science

CONCLUSION

The work of the division is constantly expanding in its capacity as not only the public relations arm of the profession but also a functioning communications service unit for the Association The division wishes to express its appreciation to the House of Delegates, Officers and Trustees of the Association, state and county medical societies, departments and staff members at A M A Headquarters, members of the Physicians Advisory Committee on Television, Radio and Motion Pictures and Advisory Committee to the Director of Communications, for their help and cooperation

DIVISION OF ENVIRONMENTAL MEDICINE

On Feb 16, 1960, Dr F J L Blasingame, Executive Vice President of the American Medical Association, addressed a memorandum to Dr Franklin D Yoder stating,

"At its meeting on Feb 5-7, 1960, the Board of Trustees approved a reassignment of staff within the headquarters It established a Division of Environmental Medicine under your direction to coordinate the staff activities of the

Department of Health Education
Department of National Security (formerly the Department of National Defense)

Department of Rural Health
Department of Occupational Health (formerly the Department of Industrial Health)

'Consideration is being given to the establishment of a

Department of Preventive Medicine
Department of International Health

"The staff of these latter departments, if and when established, would also report to the Division of Environmental Medicine"

It was also noted in this memorandum that the designation "Department was approved by the Board of Trustees for identifying staff sections, not only the staff sections serving councils, but also those that formerly operated bureaus

Original Status of the Division

The reorganization created seven Divisions, each containing a number of Departments previously called Bureaus and council staffs Among these Divisions was the Division of Socio-Economic Activities For several months prior to the year covered by this report, this Division was administered by Dr E B Howard, Assistant Executive Vice President, as Acting Director On July 1, 1959 Dr Franklin D Yoder assumed full-time administrative direction of the Division of Socio-Economic Activities At that time, the Division included the

Department of Economic Research
Department of Health Education
Council on Industrial Health
Council on Medical Service
Council on National Defense
Research Abstracter
Council on Rural Health
Medical Liaison Representative in the Washington Office
Department of Investigation (added later)

To provide continuity in departmental reports, the Division of Environmental Medicine and the Legal and Socio-Economic Division have agreed that the entire 1959-1960 report for the Department of Medical Service, the Department of Economic Research and the Department of Investigation will be published in the report of Legal and Socio-Economic Division, in which they are now located although for seven and a half months of this report year they were within the Division now known as the Division of Environmental Medicine

Mission of the Division

The American Medical Association has always been concerned with environmental sanitation, preventive medicine, and public or community health In its first annual meeting a standing committee was established whose duties were 'To present an annual report on the general sanitary condition of our country, compared with that of other localities, embracing as far as practicable, the existing arrangement of Prisons, Hospitals, Educational Institutions, Manufacturing Establishments, etc, in their relations to the laws of life and health They shall also point out with discretionary minuteness the more obvious infringements of nature's code of health generally permitted by authorities of cities and densely populated districts, and their influence on human viability, including any other information tending to the increased valuation of human life" Such was the Association's stand on protecting the public's health and fitness at its first meeting in 1848

These concepts have been expressed by councils, committees and staff members throughout the Association's history by participation in such interests as health education of the public, occupational health, rural health, national security, studies of the patterns of medical practice, the control of foods and drugs, and medical education, and by such interagency cooperation as the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association It is therefore significant that within a Division of Environmental Medicine there have been placed those staff activities and council programs directed toward community health, public health and cooperation with other countries in health protection

Activities of the Director

The principal function of the Division Director has been to effect coordination between the office of the Executive Vice President and the Departments, and the Councils and Committees served by these Departments

Anticipated Changes in the Division

The realignment of staff responsibilities, effective Feb 16, 1960, initiated programs which were not put into full effect during the year covered by this report It is expected that there will be established a Department of Preventive Medicine (or Community Health) and a Department of International Health In the absence of departments with these names, programs in these areas are carried on to the extent possible with present staff

DEPARTMENT OF HEALTH EDUCATION

The following reports cover the activities of the Department of Health Education, the Department of Rural Health and the Washington Office Medical Liaison Representatives The activities of the Department of National Security and the Department of Occupational Health are included in the reports of the respective Councils which they serve

The staff of the Department of Health Education respectfully submits herewith its forty-ninth annual report

Reorganization —The year just ended saw the Department finally included in the Division of En-

vironmental Medicine, formerly the Division of Socio-Economic Activities The Department also made its last move to its final quarters on the southwest corner of the seventh floor

Personnel—The Department suffered a serious personnel loss in the transfer of Doctor William Bolton to become Personnel Manager and Medical Director for the Headquarters office

Fitness of American Youth—The Director of the Department of Health Education was reappointed to a fourth consecutive term as a member of the Citizens Advisory Committee

The emphasis on fitness is now being expressed less through specific meetings dealing with this topic, and more by inclusion as a concept in broader health programs, such as the continuous program of the American Medical Association dealing with the health of the school age child The staff of the Department participated during the year in 21 specific events linked with the fitness program

Also closely allied with the fitness program were the resolutions supporting health and physical education in schools, which originated in this Department and were approved by the Board of Trustees, and passed by the House of Delegates * These resolutions may be expected to have important and often decisive influence upon the health programs in schools and colleges

Field Services

Field Service Activity	*Year 1958-59*	*Year 1959-60*
States visited	27*	30†
Audiences	186	130
Audiences totals	24,552	21,390
Invitations declined	100	104
Conferences, workshops and committees	85	122

*District of Columbia and Denmark
†District of Columbia, Toronto (Ontario), Canada, and Torquay, England

This Department has two major exhibits, "Seven Paths to Fitness" and Health Appraisal of the School Child," which are shown at fairs and workshops

The Department also assisted the Committee on the Medical Aspects of Sports in preparing and showing its exhibit

Correspondence—Correspondence with doctors and cooperating agencies, 7,024 (7,682)**, Question and Answer correspondence, 23,289 (18,687)

The total number of letters handled by the Department of Health Education was 30,213 (26,369) Manuscript pages of typed copy totaled 6,186 (6,544)

Questions and Answers—During the 12-month period ending 30 June 1960, we answered a total of 23,289 (18,687) letters The leading subject of interest was the human body, which brought 3,562 (1,419) requests for information and literature This was stimulated by a series of articles published in *Today's Health*

The *Today's Health* column, "That's A Good Question," contained 87 articles, 76 were prepared by the Department and 11 by the Council on Foods and Nutrition

Manuscripts, Book Reviews, Etc—The staff reviewed 13 (14) books for *The Journal of the American Medical Association* and prepared 76 (85) contributions for *Today's Health* Question and Answer column, "That's A Good Question" The staff also reviewed 12 articles for the American Association for Health, Physical Education and Recreation

The Department staff originated 30 (46) articles and 7 (8) book reviews published in periodicals other than those of the American Medical Association

Radio and Television—This Department serves as script consultant and television film critic upon request Five local radio programs and one television broadcast were made by the staff of the Department

Today's Health—Staff of the Department of the Health Education works with staff of *Today's Health* upon request Plans have been initiated for pilot studies in making the magazine available for study purposes in selected secondary schools, sending each student a free copy monthly for five months, covering a semester's health course

School Health and Fitness

During the year ending 30 June 1960, the three consultants accepted invitations in 25 states, the District of Columbia and Canada to deliver 83 addresses, to take part in 197 conferences, workshops, institutes, annual meetings, and conventions of health education or related organizations, and to perform a variety of other services

The Seventh National Conference on Physicians and Schools, sponsored by the American Medical Association and conducted under the auspices of the Department of Health Education, was held 13, 14 and 15 of October 1959

A preliminary but inclusive report of the Conference proceedings was provided to participants as they left the meeting

The Eighth National Conference on Physicians and Schools is being planned for a new location and time of the year to coordinate the meeting with the Celebration of the Fiftieth Anniversary of the Founding of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association The Conference, scheduled for 9, 10, and 11 of March 1961 at the Sheraton Towers Hotel in Chicago, will immediately follow the Joint Committee Celebration on 8 March 1961, at the same location

The Assistant Director (Hein) serves as Secretary for the Association's Committee on the Medical

*Proceedings of the House of Delegates of the American Medical Association, Miami Beach, Florida, June, 1960
**Last year's figures are in parentheses

Aspects of Sports (formerly the Committee on Injury in Sports)

The same consultant (Hein) serves as Chairman of the Committee on Study Committees of the American School Health Association, in which position he coordinates the efforts and activities of the numerous study committees of that Association

The medical consultant (Dukelow) continues as an A M A appointee to the Joint Committee on Health Problems in Education of the National Education Association and the A M A, which has reelected him Secretary He was loaned to the White House Conference on Children and Youth for five months

The other educational consultant (Wesley) is Chairman of the Public Relations Committee for the National Association of College Women in Physical Education, of the Career Films Committee for the American School Health Association, and of the Teacher Recruitment Committee for the Illinois Association of Health, Physical Education, and Recreation

Pamphlet Production

At the close of the fiscal year 30 June 1960, the Department of Health Education had stock available on 304 (403)* titles This figure included 68 (65) titles scheduled to be discontinued when stock is exhausted, and 7 (14) that will be removed from stock when replacements are ready

The Order Unit sold 584,167 (526,291) D H E publications

JOINT COMMITTEE ON HEALTH PROBLEMS IN EDUCATION

National Education Association—American Medical Association

The annual meeting of the Joint Committee was held at the national office of the National Education Association in Washington, D C, on 7, 8, and 9 March 1960 The membership of the Committee at this meeting included

Representing A M A

Ewald H Pawsat, M D (1960)
Jay J Johns, M D, (1961), V Chrm
Donald A Dukelow, M D (1962) Secy
John F Abele, M D (1963)
Granville Larimore, M D (1964)

Representing N E A

Lloyd S Michael, Ed D (1960), Chrm
Robert S Yoho, H S D (1961)
Ruth Abernathy, Ph D (1962)
Sara Louise Smith, Ed D (1963)
Kenneth E Oberholtzer, Ph D (1964)

The fifth edition of *Health Education* should be delivered to the parent organizations before 1 August 1960 for consideration and approval prior to publication

School Health Services and *Healthful School Living* are among other Committee publications

*Last year s figures are in parentheses

Other topics discussed included how physicians could improve the physical education program, the continuing benefit of physical education to the individual through activities that will have a lasting appeal and benefit, the educational and medical values of periodic health examination of the school child by the family physician, research to determine the relationship between physical activity and health, to urge schools to make a special effort to review and use current and authentic instructional materials, to urge support of closed respiratory system resuscitation to help overcome prejudice in the use of, and training in, this life-saving method

The Golden Anniversary of the Joint Committee on Health Problems in Education of the N E A and the A M A is being prepared to be held at the Sheraton Towers Hotel in Chicago on 8 March 1961, immediately following the meeting of the Joint Committee and immediately prior to the Eighth National Conference on Physicians and Schools

The A M A has appointed to the Joint Committee John Lester Reichert, M D, Chicago, and the N E A has appointed Clifford Robinson, Ed D, Supt of Schools, Klamath Falls, Oregon These replace, respectively, Ewald H Pawsat, M D, and Lloyd S Michael, Ed D

DEPARTMENT OF RURAL HEALTH

In implementing the Council program, staff assumed responsibility for all details in connection with the National Conference, and continues, in addition to regular routine duties, to handle special assignments delegated by the Division Director, Chairman, and members of the Council which include attendance at state rural health meetings, annual meetings of national farm groups, inspection trips to various parts of the country in connection with future sites for national and/or regional conferences, handles all details in connection with Council, Executive, Advisory, and special committee meetings A roster of state Rural Health Committees was compiled and distributed to chairmen of state rural health committees, executive secretaries, etc Among the general mailings were kits of material for Farm Safety Week furnished by the National Safety Council, Progress Report on Cooperative State Federal Brucellosis Eradication Program Filled individual requests for 500 Medical Scholarship and Loan Fund brochures, and there continues to be a constant demand for both the Family Health Record and Personal Health Information Card as well as the Council s two pamphlets, *Check and Know*, and *A Member of the Family—Your Doctor* Fifteen hundred individual requests have been filled for various materials

MEDICAL LIAISON REPRESENTATIVES WASHINGTON OFFICE

Medical liaison, as a separate function, was established on July 1, 1959, under the plan for reorgani-

zation of the Washington Office On this date and, subsequently, on December 1, Otis L Anderson, M D and Eugene V Jobe, M D, respectively, joined the staff as Medical Liaison Representatives The members of this staff function under the administrative supervision of the Director, Division of Environmental Medicine, and their work is coordinated with the other division activities of the Washington Office by the Manager

The Medical Liaison Staff responded to the needs of Headquarter's Divisions and Departments on request and information brought to their attention when judged to be of substantive value In carrying out these activities, liaison was established with federal agencies, international health agencies, professional and voluntary organizations Also, 15 A M A Council and Committee meetings have been attended during the year for the purpose of acquiring and maintaining a knowledge of their objectives and interests in order to assist in determining the direction in which liaison activities are needed

A substantial portion of the medical liaison representative's time has been devoted to working with Federal agencies responsible for health programs and/or having related interests, more particularly, the constituent units of the Department of Health, Education and Welfare, Department of Defense, Federal Aviation Agency, Department of State, Veterans Administration, Atomic Energy Commission, Department of Labor, Federal Housing Administration, National Aeronautics and Space Administration, and the Office of Civil and Defense Mobilization

In the Department of Defense the majority of liaison activities have been with the Office of the Assistant Secretary of Defense (Health and Medical), Director of Research and Development, the Surgeons General of the Army, Navy and Air Force Also, the Office of Dependent's Medical Care, the Defense Atomic Support Agency and the Armed Forces Institute of Pathology

In the Department of Health, Education, and Welfare, the major portion of medical liaison has been concentrated in the U S Public Health Service and, to a lesser extent, in the Social Security Administration, Office of Vocational Rehabilitation, the Office of Education and the Food and Drug Administration

Within the Public Health Service the spread of interest has been rather broad and included programs of its three major operating Bureaus, as well as the Surgeon General's immediate staff support office, as follows Office of the Surgeon General, Bureau of State Services, Bureau of Medical Services, and the National Institutes of Health

The following represents a list of the several programs under these Bureaus with which more frequent liaison has been carried on during the year In the Office of the Surgeon General, these include public health methods and international health, in the Bureau of State Services—accident prevention, chronic disease, heart disease, occupational health, air and water pollution, vital statistics, State grants, international education and Exchange, radiological health, emergency health mobilization and communicable diseases, in the Bureau of Medical Services—Indian health and hospital construction and research, and in the National Institutes of Health—research in heart disease, research grants, general medical sciences and the Clinical Center

Among professional and voluntary organizations, liaison has been established with the following Division of Medical Science of the National Academy of Sciences-National Research Council, American Dental Association, the Washington Service Bureau of the American Hospital Association, American Public Health Association, Pharmaceutical Manufacturing Association, the American Nursing Home Association, Council of State Governments, American National Red Cross, Aircraft Owners and Pilots Association, National Proprietary Association and the Medical Society of the District of Columbia

Liaison with international organizations include the Pan-American Health Organization, the Regional Office of the World Health Organization in Washington and the World Medical Association

In the Department of State, liaison activities have included the following The Public Health Division of the International Cooperation Administration, the Offices of the Inter-American Regional Political Affairs and South American Affairs of the Bureau of Inter-American Affairs, the Office of British Commonwealth and Northern European Affairs in the Bureau of European Affairs

A few of the more important areas to which special attention has been given during the year include the following

Revision of the *Red Cross Home Nursing Textbook* Participated on Advisory Committee to the American National Red Cross responsible for the review and approval of the revision

Federal Housing Administration Nursing Home Mortgage Insurance Program Participated on an Advisory Committee to the Commissioner, providing advice and counsel on the formulation of the program

Program Planning of the Council of National Organizations on Children and Youth of the Golden Anniversary White House Conference on Children and Youth Participated in the review and comment on the proposed program prior to the Conference As a delegate participated in the White House Conference generally, and specifically contributed to Work Group 70, which discussed and made recommendations on Radio and Television and their effects on children and youth

Revision of Federal Aviation Agency regulations discontinuing the practice of allowing any licensed physician to perform medical examinations on applicants for student or private pilot (Class 3) med-

ical certificates New regulations require all applicants for airman medical certificates to be examined by Medical Examiners designated by the Administrator of F A A

Progress and final recommendations of a Study Group, appointed by the Surgeon General of the Public Health Service, to study the present, and probable future mission of the Service over the next decade and to design an organizational structure to accomodate present and future responsibilities

International health and related activities of the Public Health Service, Department of State, Pan-American Health Organization and World Health Organization

Radiological health activities of the Public Health Service, Atomic Energy Commission, and Congressional hearings and reports on various aspects of atomic energy

The operation of the Residency Consideration and Commissioning Program' of the Department of Defense (Berry Plan) This year the program resulted in commissioning of more Medical Officers than could be utilized in certain specialties This is expected to occur again next year

The relationship of the Department of Defense to the National Aeronautics and Space Administration pertaining to medical research At present, N A S A is depending heavily on the cooperation of D O D laboratories and personnel, but are planning some capabilities of their own in this field

The development of Health Mobilization plans and programs, which have been delegated to the Public Health Service by the Office of Civil and Defense Mobilization

Factors influencing Medicare, such as the increasing number of dependents, retired members and changes in accounting procedures

The White House Conference on Aging Plans for the procedure to be followed at this Conference are being gradually developed

The procedures developed by the Civil Service Commission in implementing the Federal Employees Health Benefit Act

The establishment of Medical Liaison as a separate and full time activity of the Washington Office has enabled the representatives to provide additional services to personnel at headquarters

DIVISION OF SCIENTIFIC ACTIVITIES

American medicine lost an outstanding leader on the sudden death of Dr Edward L Turner on Feb 4, 1960 His death was particularly shocking to his friends and colleagues at the A M A headquarters because in the year that Doctor Turner had acted as Director of the Division of Scientific Activities he had begun to crystallize the objectives for the division He had imbued the individuals under his supervision with enthusiastic support for his objectives of coordinating the activities of the various units of the division into an integrated program as he visualized it The basic plans he formulated for the division can still serve as a foundation for the long range progress of the AMA's scientific program

Dr Ernest B Howard, Assistant Executive Vice President of the A M A, assumed the additional duties of Acting Director of the Division pending the selection of a permanent Division Director

A conference of special interest, now known as the Hershey Conference, was held at Hershey, Pennsylvania on Sept 14-16, 1959 This conference was conceived by Doctor Turner as a means of reviewing the problems that confront medical science and considering proposals as to possible activity of the A M A's scientific units in meeting these problems Its purpose was to evaluate the A M A's scientific program The Conference was attended by members of the Board of Trustees, the administrative officers of the A M A, chairmen and secretaries of the Scientific Activities Division's Councils and Committees, administrative heads of the Division's scientific units, directors of other A M A divisions, representatives from the A M A Washington Office, and 23 consultants of the total number of 70 participants The 23 consultants were representative of the outstanding medical scientists, medical educators and social scientists The program opened with presentations identifying the important issues in education and medicine, in medical sciences, and implications of sociological issues to medical sciences This was followed by panel discussions on (1) Formal Medical Education, (2) Continuing Medical Education, (3) Important Issues in the Clinical Sciences, (4) Important Issues in the Basic Medical Sciences, and (5) Important Issues in Social and Behavorial Sciences After a closed session of the consultants to consider how the AMA should implement its concern in these issues, their report was presented to the Conference The Conference gave Doctor Turner and AMA staff and officials many ideas from which plans for the Division were formulated

As a part of the extensive reorganization at the AMA headquarters, the decision was made to discontinue the Chemical Laboratory, the Department of Investigation was transferred into what is now the Division of Legal and Socio-Economic Activities, and the American Medical Education Foundation from this Division to the Communications Division

The Division of Scientific Activities was organized for administrative purposes into the following departments Advertising Evaluation, Medical Physics and Rehabilitation, Scientific Assembly, Medical Education and Hospitals, Mental Health, and Foods and Drugs The Department of Foods

and Drugs includes the administrative staff of the Council on Foods and Nutrition, Committee on Cosmetics, Committee on Research and Committee on Toxicology During the year the Committee on Pesticides was merged into the Committee on Toxicology The Secretariat of the Committee on Medical Rating of Physical Impairment was transferred from the Department of Medical Service to the Department of Medical Physics and Rehabilitation

Individual Councils and representatives of the Councils and their secretaries had the opportunity of meeting with the Committee on Scientific Activities of the Board of Trustees several times during the year

Doctor Robert Stormont resigned as Director of the former Department of Therapy and Research After 30 years of service, Dr Thomas G Hull retired from the AMA, for the last several years he had served as Secretary of the Council on Scientific Assembly Dr Charles H Bramlitt was appointed as Secretary of the Council and Director of the Department of Scientific Assembly Dr John C Ballin was appointed Director of the Department of Advertising Evaluation Dr Bernard E Conley, Secretary of the Committee on Toxicology and Committee on Pesticides, resigned, Dr DeNosaquo became Acting Secretary of the Committee on Toxicology Dr Philip L White was named Director of the new Department of Foods and Drugs Mr Robert Stark, Mr James Kottemann and Miss Arlene Gardner of the Chemical Laboratory staff found employment in their specialties in outside organizations Other members of the Chemical Laboratory staff were assigned to new positions in the A M A, Dr Walter Wolman as Assistant to the Director of the Division of Scientific Activities, Dr Gordon Schrotenboer as Assistant Secretary to the Council on Scientific Assembly, and Dr Joseph Royal as Assistant Secretary of the Council on Medical Physics New Staff members who began their activities during this period are Dr Joseph Jerome as Assistant to the Secretary of the Council on Drugs, Dr Ogden Johnson as Assistant Secretary of the Council on Foods and Nutrition, and Mr Frederick Stam as Secretary of the Committee on Medical Rating of Physical Impairment

Following are the reports of special staff activities of the Departments of Advertising Evaluation, Foods and Drugs, Medical Education and Hospitals, Medical Physics and Rehabilitation, Mental Health, and Scientific Assembly Many of the activities of the staff as related to Councils and Committees appears in the reports of those Councils and Committees

A major portion of the staff's time was spent in making deletions or appropriate revisions in copy claims which were judged to be in violation of our governing principles In addition, the Director spends considerable time in conference with medical representatives of the pharmaceutical industry

The staff, with the assistance of the various departments within the Division, prepared an expanded version of the General Principles Governing Advertising in A M A Scientific Publications A draft of this document was circulated to representative pharmaceutical houses and advertising agencies for comments and suggestions and the final version was adopted by the Board of Trustees at the Dallas meeting The newly adopted advertising principles were published (*J A M A* Jan 30, 1960, p 453) and were the subject of a conference in Chicago (Feb 11) and another in New York City (March 24) to which over 300 advertisers were invited

A similar type of expansion and clarification of advertising standards for *Today's Health* was undertaken by the staff in early 1960, the final version of these guiding principles was adopted by the Board of Trustees at its Miami Beach meeting

The department also determined the eligibility of products and services for the industrial exhibits at the Clinical and Annual Meetings of the Association Each exhibit at the time of the meeting was inspected to insure that claims were not advanced which were in violation of A M A advertising standards

DEPARTMENT OF FOODS AND DRUGS

The Department of Foods and Drugs was organized in March, 1960 Mr Eugene Stevenson resigned from the staff of the Council on Foods and Nutrition in May and was replaced by Dr Ogden C Johnson Doctor Johnson and Miss Mary Jane Kibler are Assistant Secretaries of the Council The professional staff assigned to the Council on Drugs during the current annual period included Dr H D Kautz, Secretary, and Dr Christian Wingard, Assistant Secretary Dr Wingard was appointed Associate Director of the Department on Drugs On March 1, 1960, Dr Joseph B Jerome became a part-time member of the staff and was later appointed a full time member of the staff as Assistant to the Secretary John C Ballin was transferred to the Department of Advertising Evaluation, Aug 31, as its Director

The staff of the Council on Foods and Nutrition, upon request from the Council, initiated a survey of state and county medical society nutrition programs in order to ascertain the areas of interest and need

In planning symposia, the staff worked closely with the host Council member and a committee of his choosing in planning the program and the speakers

The campaign to combat nutrition nonsense and false claims which was begun in 1958 continues to show good results During the past year, seven exhibits and a 28-minute movie entitled "The Medicine Man" have been shown in all parts of the United States

More than 238 400 copies of *The Merchants of Menace* and 192 000 copies of *The Healthy Way to Weigh Less* were distributed At least 2,000 kits of materials designed to assist in planning local programs to combat food faddism were distributed Several hundred thousand copies of other Council-sponsored reprints also were distributed In cooperation with the Communications Division a new exhibit on the nutrition of teenagers was designed

Doctor White prepared a monthly column of questions and answers, and Miss Kibler and Miss Turner were responsible for the food pages in *Today s Health*

Staff members of the Department of Foods and Drugs served as representatives of the A M A to a number of other organizations, either as consultants to members, liaison representatives, or advisors

Doctor White is a consultant to the Youth Power Congress of the National Food Conference, consultant to the Interdepartmental Committee on Nutrition for National Defense, member of the subcommittee on Food and Agriculture of the Interdepartmental Committee on Nutrition for National Defense member of the Nomenclature Committee and Chairman of the Public Relations Committee of the American Institute of Nutrition, member of the Food and Agriculture Research Advisory Committee of the U S Department of Agriculture, member of the Nutrition Committee of the Chicago Heart Association, and liaison representative of the Food and Nutrition Board to the National Research Council

Doctor White served as advisor in the preparation of a film on clinical nutrition developed by the Florida Citrus Commission in cooperation with the Communications Division

Members of the staff frequently presented speeches or exhibited at meetings of other professional groups and food trade associations

The Secretary of the Committee on Toxicology served as A M A liaison representative on the American Standards Association-K 62 Committee The Secretary represented the Association at a seminar at Utah State University on Effects of Fluorides on Man and Animal," at the Annual Meeting of the American Association for the Advancement of Sciences, at the Annual Meeting of the Academy of Forensic Sciences, at the Annual Meeting of the Association of Official Agricultural Chemists Conference, at the Annual Meeting of the American Association of Poison Control Centers, and accompanied Dr O Benwood Hunter when Doctor Hunter presented the Association s views on proposed labeling legislation under consideration by the House Interstate and Foreign Commerce Committee

Doctor DeNosiquo, as Secretary of the Committee on Research has served as liaison representative for the American Medical Association on the Clinical Studies Panel of the Cancer Chemotherapy National Service Center, National Institutes of Health, United States Public Health Service, Department of Health Education, and Welfare The Secretary represented the Association at a symposium on the "Early Diagnosis of Cancer' sponsored by the American Cancer Society, at a conference on Experimental Clinical Cancer Chemotherapy National Service Center", and at a symposium entitled Evaluation of Drug Therapy in Neurologic and Sensory Diseases" sponsored by the National Institute of Neurological Diseases and Blindness

The staff for the Committee on Cosmetics assisted in the preparation of the script for the Merck, Sharpe and Dohme sponsored television program The Other Side of the Sun Staff also prepared the format for the exhibit "Sunlight and the Skin" and wrote the pamphlet which accompanied this exhibit The Secretary regularly served in a consultant capacity to the National Better Business Bureau and its local branches, to various state and medical societies, and to radio and television stations, newspapers, and magazines regarding the acceptability of advertisements The Secretary maintained close contact with the Toilet Goods Association and participates in a frequent exchange of information with that group

DEPARTMENT OF MEDICAL EDUCATION AND HOSPITALS

The department brought to the attention of the Council, through its committees, matter which it believed should warrant modification of the published acceptable standards in medical education, modified published statements of acceptable standards in compliance with decisions of the Council for later approval by the House of Delegates, arranged and participated in the periodic reviews of educational programs in medicine, presented to the Council, through its committees, information regarding the programs reviewed so that the Council may have accurate and dependable data on which to base its decisions, prepared and published annual reports which serve to discharge the Council s function of informing the medical profession of the status of medical education in the United States These reports also serve as public notification of educational programs which are approved, and served as a central clearing house of information regarding medical education

Although the staff obviously participates and assists in the development of standards of education and in the accreditation of educational programs in medicine, the direct responsibility for these functions rests with the Council membership acting under established directives of the House of Delegates The staff does not accredit any educational program This is a real and major operational activity of the Council membership

Effective July 15, 1960, Dr Glen R Shepherd, Assistant Secretary for five years, resigned Dr John Hinman Assistant Secretary with responsibilities in

areas allied to medicine and in graduate medical education, resigned effective Sept 1, 1960, to complete his graduate training in internal medicine Three members of the Council's hospital field staff resigned during the year Dr Frank Ryan who retired, Dr Robert Lowe to become Director of Medical Education at the Lima, Ohio, Memorial Hospital, and Dr Winchell McK Craig who resigned his post to take a position as special assistant to Secretary Flemming of the Department of Health, Education and Welfare The staff was saddened to learn of Dr Craig's sudden death in January

Dr Glen R Leymaster, Associate Secretary responsible for medical school activities, will join the staff Sept 1, 1960 Dr A N Taylor, Assistant Secretary responsible for the Council's work in areas allied to medicine, and staff secretary to the Committee on the Relationship of Medicine with Allied Health Professions and Services, will join the staff August 15, 1960 Dr Ralph E Adams was appointed as an Assistant Secretary on June 10 His responsibilities will be in the area of graduate medical education Dr Herbert Schoenfeld has now been with the Council for almost a year as a hospital field representative working on a part-time basis Dr Harold G Watson was appointed effective July 25 as a field representative responsible for reviewing intern and residency programs Dr Wm Frederick Norwood, Professor of Cultural Medicine at the College of Medical Evangelists is on leave and was appointed on Feb 1 as Staff Director of the Council's Special Study Committee

In order to more effectively carry out its stated functions, the Council on Medical Education and Hospitals has recently reorganized its structure in order to provide efficient and orderly staff services to the Council under this new organization, the professional staff of the department has been assigned responsibility as follows

(1) *Director* (Walter S Wiggins, M D)—overall supervision and coordination of department activities and major staff responsibility for the Executive Committee of the Council

(2) *Associate Director for Graduate Medical Education* (John Nunemaker, M D)—supervision and coordination of activities related to graduate medical education and major staff responsibility for the Council's Committee on Graduate Medical Education

(3) *Assistant Directors for Graduate Medical Education* (Willard Thompson, M D, and Ralph Adams, M D)—secretariat to residency review committees and responsible under the Associate Director for staffing of the Council's Committee on Graduate Medical Education

(4) *Associate Director for Medical School Activities* (Glen R Leymaster, M D)—supervision and coordination of activities related to medical schools and major staff responsibility for the Council's Committee on Medical School Activities

(5) *Assistant Director for Allied Health Professions and Services* (A N Taylor, Ph D) supervision and coordination of these activities and major staff responsibility for the Council's Committee on Continuing Medical Education and Allied Professions and Services The Assistant Director will be responsible only for the Committee's considerations in the area of Allied Health Professions and Services when the presently vacant post of Assistant Director for Continuing Medical Education is filled He is also assigned as staff secretary to the Board of Trustees Committee on Relationships of Medicine with Allied Health Professions and Services

(6) *Assistant Director for Continuing Medical Education* (vacant)—supervision and coordination of program planning and activities in this field and with the Assistant Director for Allied Health Professions and Services, major staff responsibility for the Council's Committee on Continuing Medical Education and Allied Health Professions and Services

A study has been initiated to review critically all office procedures directed toward innovating more modern and efficient practices and to relate more effectively the department's medical student, intern and resident records to present needs of this and other departments of the Association

A history of continuing medical education in the United States since 1930 was prepared for publication in the History of Medical Education series in the *Journal of Medical Education* A member of the department serves on the study section of the National Heart Institute which is initiating a new program designed to strengthen the education and research potential of community hospitals A staff member served on the Executive Committee of the Council on Medical Television of the Institute for the Advancement of Medical Communication The department assisted in the development of articles on medical education and problems related to the foreign medical graduate for several national magazines and newspapers The department participated in numerous conferences and meetings related to its area of activity

DEPARTMENT OF MEDICAL PHYSICS AND REHABILITATION

The staff of the Department of Medical Physics and Rehabilitation consisted of the following Ralph E De Forest, M D, Director Doctor De Forest also served as Secretary of the Council on Medical Physics, the Committee on Rehabilitation, and the ad hoc Committee on Atomic Medicine and Ionizing Radiation, Joseph H Royal, Ph D, Assistant Secretary of the Council on Medical Physics who served from October 1959 to June 1960, when he resigned to accept a position at Argonne National Laboratories, Mr Frederick A Stam, Secretary of the Committee on Medical Rating of Physical Impairment, Mr Roderick E Darby, Research

Assistant, who joined the staff in April 1960, and Mr Rolf G Rattay, Staff Assistant, as well as four office secretaries

As part of its general activities the staff served the Council and the three Committees and provided needed consultation services in cooperating with other departments of the Headquarters

A total of 70,422 reprints or other publications of the Council and Committees were sent to interested persons or groups

The staff gathered data for use in authorized Council on Medical Physics evaluation projects which are currently being prepared

Three weeks during the month of July 1959 were devoted to filming the motion picture, Rehabilitation Adds Life to Years' During this time the Secretary of the Committee on Rehabilitation was on location serving as technical consultant A promotion program has been prepared in cooperation with the Communications Division

On behalf of the Committee on Rehabilitation, questionnaires were sent to 54 constituent medical societies to determine the status of their rehabilitation activities The replies were analyzed and incorporated into a report for the Committee's attention

One or more members of the staff participated in the following conferences or meetings the conference of the ad hoc Advisory Committee to Review Scientific Activities of the A M A at Hershey, Pennsylvania, in September, a conference at Brookhaven National Laboratories, Upton, Long Island, New York, the 12th Annual Conference on Electrical Techniques in Medicine and Biology, in Philadelphia, a meeting of the Advisory Council of the Conference of Rehabilitation Centers and Facilities, Inc, in New York City The Director was appointed by the Association to serve on the Advisory Council of this group, a conference at the Radiation Project Laboratory, Notre Dame University, a meeting of the Committee on Hospital Operating Rooms of the National Fire Protection Association, a meeting of A M A representatives with representatives of the National Research Council in Washington, D C The object of the meeting was to aid in establishing good relationships between the two groups, a meeting of the Committee on Rehabilitation of the Medical Association of Georgia at the Warm Springs Foundation, Warm Springs, Georgia, a meeting at the time of the opening of the newly created headquarters of the Conference of Rehabilitation Centers and Facilities, Inc, Evanston

The Director accepted appointment to the Intersociety Liaison Committee of the Institute of Radio Engineers

On behalf of the ad hoc Committee on Atomic Medicine and Ionizing Radiation, letters were sent to 101 outstanding men in biology, chemistry, and medicine, 106 specialty medical societies, the Association's 54 constituent societies, six major branches of the U S Government, and 18 councils, committees, divisions, and departments within the A M A headquarters The letters requested these scientists to give opinions and comments in regard to health problems created by the use of atomic energy and ionizing radiation The staff tabulated all the answers for use by the Committee at its May meeting

DEPARTMENT OF MENTAL HEALTH

The staff has maintained a close relationship, primarily through correspondence, with state and county medical societies and continued the Council's liaison with national organizations in the field of mental and emotional illness It cooperated with the Department of Standard Nomenclature of Diseases and Operations to compile and prepare for publication a section on terminology and definitions of alcoholism as a possible addition to the Committee on Alcoholism s Manual on Alcoholism, revised the Committee's Directory of State Resources on Alcoholism, implemented the necessary material for a new exhibit prepared in cooperation with the Media Relations Department of the Communications Division and prepared a flyer of information on the new exhibit on alcoholism

Staff continued to answer a deluge of inquiries concerning hypnosis from physicians, state societies' executives secretaries, medical and non-medical groups and the public in general and assisted in preparing a symposium on hypnosis sponsored by the Committee on Hypnosis and held during the Annual Meeting of the American Psychiatric Association in May, 1960 It set up the November 1959 Annual Conference of Mental Health Representatives of State Medical Associations in addition to preparing descriptive background material for the participating representatives and national organizations invited

DEPARTMENT OF SCIENTIFIC ASSEMBLY

The Director of the Department of Scientific Assembly maintained liaison with many medical organizations during the year and attended the annual meetings of the Chicago Medical Society (Clinical Congress), Illinois State Medical Association, Aerospace Medical Association, Association of Military Surgeons of the United States, American Academy of Ophthalmology and Otolaryngology, American Academy of Orthopedic Surgery, American Academy of General Practice, American Urological Association, and the National Science Fair The staff assisted some of the organizations with the development of their Scientific Exhibit and also assisted in judging the exhibits at the National Science Fair

DIVISION OF SCIENTIFIC PUBLICATIONS

The Division of Scientific Publications comprises the following segments of total activity in this order of magnitude

THE JOURNAL of the American Medical Association

The Specialty Journals

The Library and Archives

The Standard Nomenclature of Diseases and Operations

The Division Director reported for duty late in October, 1959 This Annual Report then is related especially to the activities during the eight months ending July 30, 1960 Selected comments concern implementation of actions and recommendations by the Board of Trustees which are documented in the two previous Annual Reports In other instances, reference is made to specific activities that have been considered, approved, and put into force in recent months or allowed to remain under consideration for future action

The Division activities, which have been scattered throughout various sections of the building since early in 1959, were returned to the renovated eighth floor late in the spring

Although the Editorship of the J A M A is but one of several duties of the Director of the Division of Scientific Publications, particular emphasis has been placed upon this function Such allocation of time and effort in recent months does not necessarily reflect a similar allocation for the future The magnitude of the responsibility for editing THE JOURNAL is such as to warrant its receiving unstinted attention initially

The editing of THE JOURNAL may be divided into two major phases (A) selection and processing of manuscripts, (B) handling of galleys and other items prior to publication These phases will not be discussed in sequence

The manuscripts that had been accepted for publication prior to my reporting for duty represented firm commitments, their processing was expedited as much as possible For the future it seemed desirable to concentrate on procuring an increasingly higher percentage of top quality manuscripts as early as possible One phase of this program was the dispatch of a personal letter to the heads of the departments of Medicine, Surgery, Obstetrics, and Gynecology, and Pediatrics in the 84 medical schools in this country, briefly outlining some of the changes contemplated for THE JOURNAL Particular emphasis was given to the quality of communications Furthermore, prior to my arrival in Chicago, a personal letter was sent to the dean of every medical school in an effort to enlist his interest in the scientific publications of the A M A It is believed that the number and quality of the manuscripts that now appear in THE JOURNAL attest to the fulfillment of these initial hopes

The format of THE JOURNAL, with special attention to editorial material, was another subject of great concern It was readily apparent that professional assistance of considerable magnitude was required for successful fulfillment of this task The appointment, therefore, of Mr Robert Mayo as Managing Editor became effective late in April Prior to this appointment a new design for THE JOURNAL cover was considered, approximately 25 designs were reviewed The selection was made and, following approval by the Board of Trustees, the new cover appeared on the issue of July 2, 1960 Additional minor changes in type style and format of the cover are under consideration

Each editorial page of THE JOURNAL has been reviewed with a critical eye The symbols between the original articles have been eliminated Efforts have been made to insure that the original communications begin at the top and end at the bottom of a page with no spill-over onto the next page Bold face volume page numbers appear at the top of the page and the light face issue numbers at the bottom of the page The section of Original Articles has been retitled Original Contributions Three new sections have been established Clinical Science, Special Communications, and Preliminary Communications Four sections have been abolished Medicine at Work, Customs and Idioms, The Leisure Corner, and Medical Beliefs of Yesterday The Synopsis-Abstract in the box at the beginning of each original communication is now prepared by the author The News Section has been moved to the front Advertising section The abstract section has reverted, in part, to the format of former years A new schedule for the publishing of Abstracts from each of the 10 Specialty Journals has been instituted The Abstracts and Table of Contents from each of the Archives appear in THE JOURNAL the same week the Specialty Journal is delivered to the doctor's office It is hoped that a similar regimen for an additional number of American journals will be adopted in the next few months Tear sheets of abstracts will be made available to all the state medical journals upon request Jokes in the Tonics and Sedatives section appear less frequently and have been replaced, two or three times each month, by Medical Narration or Medical Satire It is hoped to develop latent talent among American physicians so that there will be no need to revert to Tonics and Sedatives The disposition of The Bright Side remains under scrutiny The Editorials now occupy four or five pages in each issue and cover a number of subjects in basic science, medical history, and general discussion of communications appearing in

the same issue of THE JOURNAL Commissioned communications as well as discussion of controversial subjects constitute a small percentage only of current editorials The option of publishing initialed editorials for identification has been approved by the Board of Trustees A new section has been incorporated in the advertising pages entitled Summarios in Interlingua, based upon the synopsis-abstracts THE JOURNAL is the 15th periodical in the United States to adopt this policy

The publication of council and committee reports is in a transitional stage The Council on Drugs is cooperating by submitting brief reports instead of long and sometimes uninteresting material The response of other Councils and Committees has not always been enthusiastic It is believed that all material submitted for publication should carry a signature or a committee approval Book reviews are signed

Tear sheets of original contributions appearing in THE JOURNAL are available to authors Upon request, authors may receive 50 complimentary copies of their contributions If reprints are desired these may now be ordered at a reduction of from 30 to 40 per cent below the former price

The forwarding department, formerly located in the Contract Printing area, has been moved to the eighth floor This change will enable the Division to exercise close supervision over the manuscripts, galleys, and other pertinent items

There have been two new assignments to the Editorial Staff Mr Robert Mayo is Managing Editor, as noted above Dr Burgess L Gordon reported for duty early in July, 1960 One of the major responsibilities of Doctor Gordon will be the exploitation of electronic computers, data processing machines, and other electronic devices for (1) classification of nomenclature of disease, (2) storage and tabulation of medical data, and (3) abstracting medical literature The manuscript department, formerly under the supervision of Miss Elaine Nantkes, has been transferred to Mr Charles Chapman He will continue on as the Department Head responsible for Medical News Dr Theodore Johnson was transferred, at his request, to the Socio-Economic Division

Specialty Journals—Four changes in the chief editorship of the Specialty Journals have been made in order to implement the motion of the Board of Trustees regarding tenure of office Dr Warren Wheeler replaced Dr Richard Day as Editor of the *American Journal of Diseases of Children*, Dr George Shambaugh replaced Dr George Coates as Editor of the *Archives of Otolaryngology*, and Dr David Cogan replaced Dr Francis Adler as Chief Editor of the *Archives of Ophthalmology* Dr Philip Drinker has resigned as Chief Editor of the *Archives of Environmental Health*, (formerly *Archives of Occupational Health*) and will be replaced on Oct 1, 1960, by Dr Katherine R Boucot Dr Garrott Allen has assumed responsibilities as Acting Chief Editor of the *Archives of Surgery* during the year that Dr Waltman Walters will be out of the country Several additions have been made to the Editorial Board of each Specialty Journal A strong feeling against a specific tenure has been voiced by several members of the Editorial Boards It is believed, however, that this is an excellent policy and should be respected

The Annual Meeting of the Chief Editors of the Specialty Journals was held in Atlantic City on May 2, 1960 Meetings with four Editorial Boards have been held during the year as follows

American Journal of Diseases of Children, January 18
Archives of Internal Medicine, May 3
Archives of Otolaryngology, July 11
Archives of Pathology, April 10

Rump meetings of the *Archives of Neurology* and the *Archives of Surgery* were held in Boston on June 13, 1960, and at Greenbrier on April 14, 1960, respectively

The letters "A M A" were removed on July 1 from each Specialty Journal This involved a reversion to its former title for the *American Journal of Diseases of Children* The *Archives of Occupational Health* was changed to the *Archives of Enviromental Health* with the subheadings Preventive Medicine, Occupational Health, and Aerospace Medicine

Library and Achives

The Library had been functioning under the direction of Mrs Hodgson prior to March 1, 1960 On that date she retired at her request and Mrs Susan Crawford was appointed in her place Mrs Crawford has been associated with the A M A for several years as a professional librarian In addition to the Library responsibilities of former years, three new activities have been assigned to this department (1) a photo-duplication service has been initiated for all divisions in the building, (2) the Archives, which constitute all official actions of the Association, are being assembled and catalogued, (3) a retrieval program for same has been instituted Eventually the Archives and retrieval program should be an important function of general interest to the Association

The Library, in its new quarters, will provide better service to all divisions Every effort will be made to avoid duplication of material in division libraries

The Package Library program has been strengthened and provides the names of libraries in communities where physicians might do reference work personally Photo-duplication of material available for dispatch and other devices to help the physician obtain reference material are other improvements

Standard Nomenclature and Disease

The 1960 edition of *Standard Nomenclature, Diseases, and Operations* went to press last fall The anticipated publication date will be late in 1960 The second phase of the department activities concerns institutes that have been held from time to time in various cities Admittedly the job done by the institutes in the past has satisfied only a small portion of the total need, if the principles of Standard Nomenclature are utilized maximally throughout the accredited hospitals in the United States The third function is the department dealing with answers to questions concerning the use of Standard Nomenclature

A meeting was held in Washington, D C in April with representatives of the American Hospital Association, the American Association of Record Room Librarians, the United States Public Health Service, the Veterans Administration, and the Armed Forces under the aegis of the American Medical Association At the conclusion it was recommended that the entire mission and concept of Standard Nomenclature should be evaluated by a duly appointed committee Acting on this recommendation, the Board of Trustees appointed an advisory committee with representatives from interested agencies This committee will explore in depth the problem of nomenclature and classification At this time the committee has been duly appointed, no meeting has yet been held Meanwhile, no new Institutes will be scheduled

Medical Journalism Program

With the approval of the Board of Trustees, plans are under consideration for a comprehensive program in medical journalism It is hoped that one or more universities in greater Chicago will cooperate in this program Little beyond preliminary planning may be noted at this time Even so, there are two Fellows participating in training throughout the summer months and a third Fellow is scheduled for the program in the fall The short-term Fellowships of approximately three months each are available currently for medical students or, in selected instances, premedical students Ultimately, it is hoped to have a program with Fellowships of one year's duration for physicians who plan a part-time or full-time career in medical journalism There is yet a third type of Fellowship under consideration This would be for one month only and would be designed to provide a 4-3 weeks concentrated course for lay personnel from state medical journals or medical publications of pharmaceutical houses Limited funds have been approved by the American Medical Education Research Foundation Supervision of this program requires the part-time or full-time services of one person, this appointment has not been made as of this date

In reviewing the opportunities in the Division before coming to Chicago it was necessary for the Director to take a number of presumptions for granted His knowledge of the organization of the American Medical Association was not detailed and the data at his disposal was meager Eight months later the information available has increased immeasurably The opportunities to pursue the duties and responsibilities of the Director of Scientific Publications provided by the Executive Vice President's Office, the Committee of Scientific Activities, and the Board of Trustees have been gratifying The utmost cooperation has been extended to the Director at all times He has enjoyed the enthusiastic support and cooperation that he had hoped would be his and the warmest of personal relations in each echelon This was indeed appreciated

FIELD SERVICE DIVISION

Staff—Field Service Division
Aubrey D Gates, Director
Rueben M Dalbec, Field Representative
Charles Johnson, Field Representative
Joe D Miller, Field Representative
Richard Nelson, Field Representative
Cecil Dickson, Legislative Representative
James Forristel, Legislative Representative
Harold Slater, Legislative Representative
R O Beckman, Consultant on Aging—Temporay

Legislative Liaison

The staff's work at the onset of the period covered in this report, typifies the activities of the Field Service Division for the last year Late in June, 1959, the Chairman of the House Ways and Means Committee scheduled a week of hearings on the Forand Bill, to be held in July Immediately after this announcement, the Forand Staff Task Force met and outlined the activities necessary to meet the American Medical Association's responsibilities in connection with these hearings The Field Service Division staff then called the executive secretaries and officials of the medical societies of the 48 states, to make two principle requests, one, that as many state societies as possible ask for time for spokesmen to appear before the Committee, and two, that the remainder of the state societies prepare and submit to the Committee, a statement in opposition to the Forand Bill

Thirty-four state societies readily responded and applied to the House Ways and Means Committee for time to appear as witnesses Because of time limitations allocated by the Committee, it became necessary to select only 12 states, and to ask the other twenty-two state societies to cooperate by

relinquishing their time, and instead, submit a statement to be filed with the Committee Every state society cooperated in the finest way and the Field Service Division devoted itself to assisting, in some cases, with the preparation of the testimony and the statements, and, continually, to the task of getting delegations of doctors to attend the hearings and send as many communications as possible by letter, telephone and telegram, to all of the Congressmen, as well as to the members of the House Ways and Means Committee

During this crucial period, the Washington staff of the Field Service Division performed those choices of maintaining liaison with the Committee and with members of Congress in obtaining an allocation of time, working with the Law Division in briefing those who were to testify, and arranging appointments and other functions pursuant to state delegation visits to Washington, during the time of the hearings

In short, the Field Service Division synchronized its efforts in this instance as it does in all cases, with the activities of the management, the other Divisions of the American Medical Association, and with the state and local societies, to the end that the staff could make its best contribution to the total effect of spokesmen for the American Medical Association's appearance before the House Ways and Means Committee

These activities have characterized the work of this Division throughout the year as every effort has been made to function only as a member of a team and to perform the assignments falling within the Division's responsibility, or as requested by the management and others within the Association

From the foregoing, it can be seen that there are two main functions of the Field Service Division in legislative activities—liaison with the Congress in Washington, and liaison with the State and County Medical Societies in cooperation with all units of the American Medical Association

The three registered lobbyists of the American Medical Association, whose titles are Legislative Representatives, are members of the staff of this Division, their functions being to maintain close liaison with the leaders and the members of the Congress, taking to and interpreting for them American Medical Association policy and American Medical Association information, and making arrangements and appointments for the officers and trustees of the Association to meet with the leaders of the Congress, when such is required or desirable They regularly bring back from the Congress whatever information is available and pass it on to the Association headquarters in Chicago The activities of these three men are not only synchronized with the Chicago office, but with the remainder of the A M A staff in Washington

Legislative Follow-up

The second part of the Field Service Division activity in legislation is that of developing closer liaison with the state and county societies, as has been described above The Division's activities have been harmonized with the Forand staff Task Force, with the Council on Legislative Activities, State Executive Secretaries, Key Men, and the state association's Legislative Committees

When it became evident, near the recess of the first session of the 86th Congress, that Forand-type legislation would not be reported out of the House Ways and Means Committee, plans were made by the Field Service Division staff for an extensive program of intensive contacts by the medical profession and its lay friends, when the members of Congress returned to their home Districts and states, during the recess period The meeting held by the Council on Legislative Activities in St Louis on November 1, gave national opportunity to intensify and highlight this activity, as well as to achieve the other objectives set out for that meeting

The staff of the Field Service Division, both in Washington and in the field, recognized that there needed to be developed a closer liaison between individual Congressmen and the physicians in their Districts To do this, a complete listing of all the physicians in 408 of the 437 Congressional Districts was prepared Each list was sent from the Chicago office to the Legislative Representatives in Washington, who then delivered the lists to the respective Congressman Each Congressman was requested to check the list and designate the names of those physicians he knew personally and with whom he felt he had the best working relationship The Congressmen were told that they could use the entire list for correspondence with the physicians in their districts

While the responses from the Congressmen have not been 100%, this has been the most effective action taken to impress the members of Congress with the fact that organized medicine wants to work with them in a reasonable, wholesome cooperative way

Now that the elections are approaching, members of Congress are still coming forth with suggested lists of physician-committees with whom they would like to work in their home Districts Eventually, the staff will develop from this a more effective method of working with the Congress, consisting of a more direct relationship with the practicing physicians in his home district, the county medical societies to which these physicians belong, the state medical associations and the American Medical Association This will enable the Field staff to keep the channels of communication open and operating from the physician's office, to the Congressman's office, and vice versa The Division will continue to expand its efforts in this area

Legislative Climate

The climate in which a legislative program is projected, is as important as the program itself The Field Service Division therefore, has given careful attention to the other aspects For example, the staff has worked with the state and county medical associations in developing a closer liaison and better understanding of the problems of aging, with many lay organizations and the leaders of these organizations The special work performed by the Consultant on Aging, in locating and contacting the aging groups, such as "Golden Age" clubs, and other types of activities in this general area, provided the Division with the initial start for developing closer liaison with the aging citizens in the communities where they live It was found that the senior citizen would like to have—and needs—medical leadership and guidance in a broader respect than the individual medical care they receive Seven thousand of these organizations were listed by name and address and the staff is now developing ways whereby state and county medical associations can reach these groups, with understanding and with service

Field Work on Aging

The Division has assisted the Department of Medical Service in working with the Aging Committees of the state medical associations in the projection of their over-all state and local programs The staff assisted in promotion of attendance at the regional conferences on aging and also cooperated with the Communications Division, the Law Division, and others, in getting medical and allied attendance at the regional meetings held by the McNamara Committee

When the allocation of delegates was made by those in charge of the White House Conference on Aging, the Field staff immediately took this information to the states, in an effort to get as many physicians and qualified lay leaders as possible designated by the Governors of the states, to be delegates to this Conference At the same time, the Division worked with the states in getting physician-representation on the Governor's Committees on Aging, which have the responsibility of developing statements to be presented to the White House Conference

The states were also encouraged to work with the insurance industry, chambers of commerce, and other groups, to likewise obtain representative delegates to the White House Conference on Aging This met with an excellent degree of success, in spite of the fact that social and welfare workers immediately and spontaneously requested that they be designated among the state delegates

Hospital Liaison

The hospitals that compose the American Hospital Association, and various state hospital associations, are one of the most closely related groups to the American Medical Association Working through the state and county medical societies, the staff has endeavored to set up as close liaison as possible with the administrators, the medical staffs, and the boards of trustees of hospitals throughout the country Because of the number of hospitals, and because of Division staff limitations, this has not been as complete as desired, but it has been productive A continuing effort in this regard will be pursued

Rural Health

The Council on Rural Health, working with the Executive Vice President, the Director of the Division of Environmental Medicine, and the Field Service Division, has developed a plan whereby the A M A's field program with rural groups in the United States will be reinaugurated These groups, for the most part, have the same philosophy as the A M A and will cooperate most wholeheartedly in all types of programs, to improve the health care of rural people and to provide stronger ties and better working relationships Staff contacts in the states have just begun, insofar as the development of the rural health program itself, but throughout the year, organizations like the American Farm Bureau and the Grange, have given support to medicine's position against Forand-type legislation

In the New England region, Dr Norman H Gardner has carried on an admirable program of cooperation with the rural groups This culminates each year in a regional conference Staff contacts with farm groups in the New England states indicate that the net effect of this approach has been excellent

The National Conference on Rural Health has continued to keep alive a number of state activities and on this foundation, the Division's staff will now endeavor to rebuild a stronger program In a number of states, the relationship between the medical association and the rural groups, leaves much to be desired, and it is to these particular areas that concentrated attention will be given in the coming year

Special Activity Staff

At the Interim Session in Dallas, in December, 1959, the Board of Trustees authorized Doctor Blasingame to augment the staff of the Field Service Division by the use of part-time temporary employees Through various flexible arrangements, 17 individuals were so employed, 4 of them from the A M A staff, outside of the Field Service Division, and the remaining 13, from state or county medical societies, or from closely related groups

The purpose of this concentrated effort was to step up contacts with the Congress, particularly in regard to letter, telegram and telephone contacts in opposition to the Forand Bill A time-table and step-by-step plan was developed with the Forand

Staff Task Force and the Field Service Division staff All phases of this special effort were handled under the Field Representatives responsible to and for their regularly assigned states

As a result, the county and state medical societies deluged the members of Congress with communications It was estimated that, in the two weeks prior to the initial consideration given the Forand bill by the House Ways and Means Committee, the chairman of that Committee received more than 300,000 pieces of mail The other members of the Committee also received a large volume of mail, as did all of the members of Congress Physicians and their friends conducted a concerted campaign The action taken by the House Ways and Means Committee is evidence of the effect of this program, when it is recognized that the proponents of Forand type legislation were equally as active in support of the measure, as were we in our opposition

To demonstrate the productiveness of this effort, the staff would like to mention the work of the Cumberland County (Pennsylvania) Medical Society, under the leadership of Dr H Robert Davis Approximately 22 doctors and 14 members of the Auxiliary were selected to spearhead the program Some 26 local organizations were addressed and over 4,000 pieces of literature distributed As a result, and similar activities with other professional and lay groups, over 1,500 letters were written to the members of Congress

Outstanding Examples of Physician's Legislative Effectiveness

Two events illustrated the effect of organized physician activity, the City Councils at Wichita Falls, Tex, the home town of Congressman Frank Ikard, a member of the House Ways and Means Committee, and Knoxville, Tenn, the home town of Congressman Howard W Baker, also a member of the House Ways and Means Committee, passed resolutions in support of the Forand Bill When information on this was received, the Field Service Division immediately joined the physicians in these areas and mapped out a program which resulted in a reversal of these positions by both City Councils

In Knoxville, the liaison was established by Dr Charles Smeltzer, who mobilized a citizens group and attended the City Council meeting with the result that the Commissioners were persuaded to reverse their previous action The local physicians in the Wichita Falls area were led by Dr James Little

While these are only two of scores of effective actions taken, these served to repudiate and neutralize great pressure from labor and tremendously strengthened medicine s cause with the House Ways and Means Committee, and with Congress

Much that the Division does is intangible It has to do with human relations and therefore cannot be statistically reported Since this work has been largely in legislation, with the members of a team just getting acquainted with each other, and with the work, the staff has been ever mindful of the vast amount to be learned, and the need to build on successful experiences

The Field Service Division has learned, in this first full year of operation, that the three Legislative Representatives of the A M A, and all of the other staff members in the Washington office, can be effective only insofar as the A M A is well organized and active in the field Likewise, field operations would be severely handicapped if there were not the fine operating group in the Washington office

The staff has especially learned the need for close teamwork with all Divisions and Departments of the Association, and with the state and county societies The power of the informed practicing physician and his lay friends 'back home' has been proven An undertaking of this kind calls for the greatest degree of teamwork between all members of the staff of the A M A, the state medical associations, the county medical societies and the individual practicing physicians Each must recognize his identity of interest with the other, and with the group, as well

Throughout the year, this Division has recognized its weakness in depth and the need for more concentrated attention to problems and crises which have developed Each staff member has recommended and urged expansion of the staff so that, in future activities, the Association will have built up a backlog of experience and information necessary to cope with problems as they arise

The A M A needs greater strength among the opinion-molders and opinion-leaders in each state and community For each person contacted during the past year, there were countless other contacts which should have been made

In the future, the staff will concentrate on those subjects and in those areas in which the Association in endeavoring to strengthen its over-all public relations as well as in those areas where greater service to the public, through the medical profession, per se, will create a better climate in which to work

The Division will especially concentrate on activities to bring about closer team work with all physicians and all components of organized Medicine The staff invites and urges suggestions which will help to make the Field Service Division s over-all activities more effective

The entire staff of the Field Service Division expresses its gratitude to all the other members of the TEAM, for the cooperation received from every source

The Division is particularly grateful to the officers, to the Board of Trustees, and the Management of the Association, for their support

LEGAL AND SOCIO-ECONOMIC DIVISION

The Legal and Socio-Economic Division was created in February, 1960, when the activities of the former Law Division were combined with those of the Department of Economic Research, Department of Investigation, and the Department of Medical Service Until then, these three departments had been a part of the former Division of Socio-Economic Activities Shortly thereafter, the Law Department, Legislative Department, Department of Medical Ethics, and Department of Legal Medicine were created within the Division and staffed with personnel from the former Law Division Thus, this report covers the activities of the former Law Division and the seven departments, which now comprise the Legal and Socio-Economic Division

During the period of this report, the Division has continued to operate as the coordinating agency for the legal and legislative activities of the Association With the reorganization, the Division also assumed the administration of the Association's socio-economic and investigative activities

The Division has continued to provide staff assistance for the Judicial Council, Council on Medical Service and its Committees, Council on Constitution and Bylaws, Council on Legislative Activities, Committee on Medicolegal Problems, Medical Disciplinary Committee, Committee on Medical Practices, Committee on Relationships Between Medicine and Allied Health Agencies, and numerous other committees

As part of its socio-economic activities, the Division will also be responsible for staffing the Commission on the Cost of Medical Care which was established at the Association's Annual Meeting in Miami Beach, June, 1960

The aim of the Legal and Socio-Economic Division is to develop programs and research projects and to coordinate activities in the fields of law, legislation, socio-economics, medical service, and investigation as they relate to the Association

Personnel

Because of the many changes in the designation of staff positions and the addition of new personnel, a complete list of staff positions and personnel follows

Division Director, C Joseph Stetler
Assistant to the Director, Tom K Murra

Department of Economic Research

Department Director, Arthur Kemp, Ph D
Assistant Director, Leonard W Martin, Ph D
Research Associate, Walter R Livingston

Department of Investigation

Department Director, Oliver Field

Department of Medical Service

Department Director, George W Cooley
Assistant Director, Private Insurance, Howard O Brower
Assistant Director, Prepayment Plans, John Rowland
Assistant Director, Aging and Chronic Illness, John Guy Miller
Assistant Director, Medical Facilities, Henry Mason
Assistant Director, Medical Care Industrial Workers, Murray Klutch
Assistant Director, Maternal and Child Care, Donald Berg
Assistant Director, Government Medical Services, James Fleming
Research Associate, Special Studies, John Shannon, Ph D
Statistician, Herman Gruber

Law Department

Department Director, Bernard D Hirsh
Staff Attorneys, William J McAuliffe, Jr, Warren Whyte, and Elyce H Zenoff

Legislative Department

Department Director (Acting), C Joseph Stetler
Legislative Attorney, Paul R M Donelan
Legislative Research Associate, Lee Ann Elliott

Department of Medical Ethics

Department Director, Edwin J Holman

Department of Legal Medicine

Department Director, George E Hall
Executive Assistant, Bess McDonald Spies

Commission on the Cost of Medical Care

Director, C Joseph Stetler
Assistant Director, Theodore Johnson, M D
Assistant Director, Thomas E Hanrahan

Law and Legislation

Many of the medicolegal projects and programs developed during the year involved the efforts of attorneys and staff people from the Law Department, Legislative Department, Department of Medical Ethics, and Department of Legal Medicine For purposes of simplification, the activities of these four departments will be described in this section

The attorneys in these departments have acted as legal advisors to the Board of Trustees and the House of Delegates, as well as to the officers and executive staff of the Association This work has involved a variety of legal problems dealing with contracts, taxes, leases, copyrights, trade marks, anti-trust law, libel slander, and insurance

Liaison Activities

All of the attorneys in these departments continued to maintain liaison with one or more of the Association's permanent councils and committees by attending meetings, assisting in the answering of correspondence, and giving legal advice

The staff has, through correspondence and personal visits, maintained contact with state and

county medical societies Representatives of these departments have spoken at, or presented programs on medicolegal subjects and legislative matters at various meetings

Although a statistical record has not been kept of the number of letters received and answered, there is no doubt that several thousand written and verbal inquiries were answered by the members of these four departments These calls and letters from individual physicians, attorneys, medical societies, and other organizations dealt with a wide variety of problems in the medicolegal and legislative field and in the area of medical ethics

Publications

The Law Department has continued publication of a newsletter called *The Citation* which reports court decisions and medicolegal trends affecting medical societies and individual physicians *The Citation* is sent each month to the legal counsels and executive secretaries of state and county medical societies

The *Medical Legislative Digest* continues to be prepared by the Legislative Department for the Council on Legislative Activities Issued twice a month while Congress is in session, it contains reports on, and lists of, current medical legislation *Medical Legislative Digest* is sent to key legislative personnel and executive secretaries of state and county medical societies

A new newsletter, *Legislative Roundup*, was inaugurated on May 27, 1960 Containing a brief summary of the latest legislative developments in Washington, it is written, mimeographed, and mailed each Friday while Congress is in session Prepared by the Division Director s staff for the Council on Legislative Activities, the newsletter is sent to a restricted list of Association officers and officials of state and county societies who are vitally concerned with Federal medical legislation

Preparation or Review of Published Material

All of the attorneys have continued to work closely with the editors and the staff of the J A M A, specialty journals, *Today's Health*, and *The AMA News* in reviewing material with possible legal implications

Staff attorneys prepared or aided in the preparation of articles for the J A M A These included in Opinion of the Judicial Council on the division of group or partnership income, Aug 8, 1959, Questions and Answers on Income Tax, March 12, 1960, and History of the A M A's Legislative Activities, April 2, 1960

Members of the four departments aided the staff of *The AMA News* in preparing its regular medicolegal section A readership survey of *The AMA News* disclosed that medicolegal articles were among the best read in the publication

Activities

Following are some of the more significant activities of the year which give an insight into the areas in which these four departments work

Survey of State Statutes—At the request of the Committee to Study Medical and Related Professions and Services and at the direction of the Board of Trustees, a survey of state statutes relating to paramedical groups was made The study was conducted to determine whether or not any of these groups are regulated by law and, if so, whether or not the members of the Regulatory Boards are physicians or paramedical practitioners Information was also sought on the name of the licensing agency, whether or not the licensed activity is limited in scope and is required to be under the direction and supervision of a physician, and whether or not the laws set forth specific educational requirements, grounds for revocation, etc

Forand Bill—Staff prepared testimony, briefed witnesses, and attended hearings of the House Ways and Means Committee on H R 4700 (the Forand Bill), Washington, D C, July 13-17 During the period of this report, staff prepared, or aided in the preparation of testimony and letters in connection with various bills on health care of the aged and other medical legislation

A M A-A H A Liaison—Staff conducted two meetings of the A M A-A H A Medicolegal Education Committee one in Washington, D C, Sept 19, 1959, and the other in Chicago, May 21, 1960 Medicolegal problems and insurance coverage involving hospitals and physicians were discussed

National Legislative Conference—On Oct 2-3, 1959, a National Legislative Conference was held at St Louis, Mo Some 240 persons, representing all of the state medical societies, attended The program was dedicated to a discussion of the activities and plans of the Association in the legislative and political fields with particular reference to H R 4700 (Forand Bill)

Manual on Chemical Tests—The *Manual on Chemical Tests for Intoxication* was completed Hailed as the most authoritative work of its kind, the first printing of the manual was exhausted within a period of weeks

Medical Professional Liability—At the request of the Committee on Medicolegal Problems, an investigation was made into the liquidation of British Commercial, a surplus line underwriter which had provided part of the malpractice coverage in Lloyds, London and/or Companies" policies More than 11,000 American physicians had purchased these policies between 1952-1956 Information gathered and published in *The AMA News* brought pressure on the British insurance fraternity and materially aided physicians who had purchased these policies and were involved in suits

Medical Legislation—A comprehensive report outlining the status of medical legislation introduced during the first session of the 86th Congress was prepared and distributed As of June 30, 1960, the total number of medical bills analyzed during the 86th Congress was 708

State Legislative Program—A new state legislative program in which the Association would serve as a clearing-house for state legislative matters was initiated

Medicolegal Course—The Board of Trustees authorized a cooperative effort between the Association and the University of Chicago to establish a correspondence course for physicians on medicolegal problems Staff worked with members of the university's home study department to prepare the course which is expected to be ready in the fall

Medicolegal Film—Staff assisted in preparing script of a medicolegal film entitled "The Silent Witness" The film on chemical tests for intoxication was premiered at the Miami Beach meeting "The Silent Witness" was the final film in a series of six which was prepared jointly by the American Medical Association and the American Bar Association, with the financial assistance of the Wm S Merrell Co of Cincinnati

Medical Practice Acts—A report was completed and distributed dealing with the inclusion in the state medical practice acts of the treatment of mental disorders as the "practice of medicine"

Medicolegal Education—Questionnaires were sent to all U S medical schools to determine the type of legal medicine courses being taught to medical students

Disciplinary Committee—Staff initiated an analysis of court decisions involving disciplinary actions of medical societies and licensure boards, and a review of constitutions and bylaws of state societies regarding provisions dealing with medical discipline

COPE Charges—Staff investigated 16 charges made by the AFL-CIO's Committee on Political Education (COPE), alleging that the A M A took positions on health matters which were detrimental to the public welfare These charges were shown to be false, and information showing the actual A M A position was published in *The AMA News*

Pension Plan—Staff completed preparation of the legal description of the pension plan for employees of the Association

Group Retirement Program—A survey of the possible advantages and disadvantages of a national group retirement plan for members of the Association was completed A report, based on the survey, was prepared and presented to the Board of Trustees and the House of Delegates at the Miami Beach meeting The House found the administration of a group annuity plan for physicians to be a proper function of the Association and instructed the Board to take competitive bids and present a program at the Clinical Session in Washington, D C, Nov 28-December 1

Group Disability Insurance—A survey of the possible advantages and disadvantages of a national group disability insurance program for members of the Association was completed A report, based on the survey, was prepared and presented to the Board of Trustees and the House of Delegates at the Miami Beach meeting The House approved the establishment of such a program and instructed the Board to make further studies and present its findings at the Clinical Session in Washington, D C

Legal Conference—More than 150 persons attended the Legal Conference for Medical Society Attorneys and Executives, May 20-21 Panel programs on Medicolegal Problems, Tax Problems, and Medical Professional Liability were presented A M A attorneys served as moderators of each of the panels, and two A M A attorneys participated as panelists Proceedings of the conference were edited for publication in the near future

Medical Ethics—Questions on medical ethics were prepared and submitted to the Judicial Council These questions were discussed at the Judicial Council's meeting in Miami Beach, June 12

Eugenic Sterilization—A report reappraising eugenic sterilization laws was completed The report was submitted to the Council on Mental Health and published in the *J A M A*

Investigative Activities

The Department of Investigation has as its primary objective the collection and dissemination of information on "patent medicines," quacks, medical fads, and various other phases of pseudomedicine It is a clearinghouse for information on the subjects with which it deals Federal, state, and municipal health officials, teachers, physicians, and others interested in the public health refer inquiries to the department

The department collects its information through original investigations, data received from federal sources, state and municipal boards of health, published information, reports of special commissions, etc

The department disseminates its information mainly by means of letters in answer to inquiries In addition, articles have been prepared for the *J A M A*, *The AMA News*, and *Today's Health*

Many newspapers and magazines request information regarding the advertising of products that come within its purview The National Better Business Bureau and affiliated local Better Business Bureaus are also vitally interested in this activity

Inquiries on cancer treatments were the most numerous, followed closely by vitamins and minerals, arthritis and rheumatism "cures," and reducing schemes

Examples of specific activities in this area include

(1) Aid was given to feature writers whose articles in lay publications exposed the abuses of vitamin promotion and certain treatments for obese persons

(2) Source material and data were furnished to the authors of two popular books published during the year—one on quackery and the other on the career of one of the most notorious quacks in the nation's history

(3) A report was published in the *J A M A* covering 'sicca cell" therapy because of the wide interest in this 'rejuvenation" treatment practiced by a Swiss physician

(4) Information was provided for individuals and law officials who inquired about "hospitals' and "clinics" in Missouri which advertised their treatments for hemorrhoids, hernias, and prostatism

Economic Research

The Economic Research Department operated primarily as an advisory and consultative organization providing interpretive and analytical comments, opinions, and observations on questions of medical affairs having economic implications These were presented either orally or in written memoranda to individuals and groups both inside and outside the American Medical Association Less emphasis was placed on primary research than in prior years in order to direct more time and effort to the above functions as well as the fight against legislation threatening the freedom of the private practitioner of medicine

In order to foster primary research, and to conduct it through channels other than the American Medical Association, an Economic Research Advisory Committee was established Members were chosen from leaders in the academic profession They are President George C S Benson, Claremont Men's College, Dr W Glenn Campbell, Director, Hoover Institution on War, Revolution, and Peace, Prof Herrell DeGraff, School of Nutrition, Cornell University, Dr Felix Morley, Gibson Island, Maryland, Dr F A Harper, Foundation for Voluntary Welfare, Prof Friedrich A Hayek, Committee on Social Thought, University of Chicago, Dean Aldon S Lang, Hankamer School of Business, Baylor University, Prof James W Wiggins, Dept of Sociology and Anthropology, Emory University

The Economic Research Advisory Committee serves as an advisory group to the American Medical Association's Department of Economic Research and the Legal and Socio-Economic Division Its function is to encourage and to foster economic research programs and studies having significance to the professional practice of medicine by independent scholars or independent organizations engaged in professional research activities

Basic responsibility for the research done, and its interpretation, is placed on the single author-scholar or organization conducting the research The Economic Research Advisory Committee will provide advice, suggestions, approval, or disapproval of projects and evaluation of results The aim is to achieve objective scholarly studies which may have wide usage and acceptance The Committee will meet four to five times a year for a day or more as the occasion requires

Much of the time of the Economic Research Department's staff was directed to the preparation of memoranda, drafts of testimony, suggestions, observations, questions and answers on the salient and vulnerable features of H R 4700, 86th Congress, and other legislation and hearings

A detailed and extensive critique was prepared of the HEW report to the House Ways and Means Committee on Hospital Insurance for OASDI beneficiaries

A substantial number of memoranda were prepared dealing with relative value studies and relative value fee schedules An evaluation of the economic principles applicable to relative value scheduled was prepared by the Department, copies of which were circulated to inquiring physicians and state medical societies

The Economic Research Department has continually criticized the use of physician-population ratios An extensive analysis and critique of the Bane report dealing with the supply of physicians was prepared by the Department

In advising upon certain opinion research projects proposed within the A M A, the Economic Research Department raised questions as to their value, advisability, and validity

The Department prepared drafts of speeches for various employees, officers and members of the A M A as well as providing other departments with data of a statistical and economic nature

A statement was made by the Department, in the form of a memorandum, proposing certain tax revisions—particularly tax deductability for all medical and hospital expenses, incentives for younger members of the family to contribute to the general support of medical care costs of the aged, and support not only for Simpson-Keogh type legislation for the self-employed but extension generally of that principle to all members of the society

Summaries of lectures on the provision of health services in Britain, delivered by Prof John Jewkes at the Institute on Freedom & Competitive Enterprise in Claremont, Calif, have been made available and distributed by the Department

Material was provided for a *Today's Health* article entitled, Real Cost of Health Care Drops in Twenty Years"

Five thousand copies of the booklet, *Voluntary Health Insurance in the United States* by W Glenn and Rita Campbell, published by the American Enterprise Association, were obtained for the purpose of distributing them to participants in the

White House Conference on Aging The booklet will also be mailed to all state and county medical societies

At its first meeting the Economic Research Advisory Committee recommended approval of the following research projects to be undertaken by independent scholars (1) A Voluntary Health Care Reader, (2) Foreign Experiences in Socialized Medicine

At its second meeting, the Economic Research Advisory Committee approved an outline for the Voluntary Health Care Reader which has been undertaken by George B de Huszar, independent scholar, author and editor of several volumes such as "The Intellectuals" The Committee also approved another proposed publication to consist of essays on foreign socialized medical systems prepared under the direction of Prof Helmut Schoeck of Emory University The Advisory Committee received a brief report on a national survey of resources, income, and attitudes of non-institutionalized white aged—A Profile on Aging—which will be useful to the A M A in its fight against Forand-type legislation

The Economic Research Department has worked closely with many departments within the A M A assisting them with advice on economic matters relating to the private practice of medicine The department prepared a detailed questionnaire for the Field Service Division to determine how patients 65 and over meet their hospital obligations The department has worked closely with *The AMA News* in producing numerous short articles and charts dealing with matters pertaining to medical care costs, consumer expenditures for medical care, taxes, income, etc

In August, 1959, a research paper entitled "The Unit of Output" was presented at the Public Relations Institute The paper emphasized the distinction between expenditures and costs It argued that the office visit, for example, is at best, only a crude unit of output but is used by the Bureau of Labor Statistics in computing its Medical Care Price Index which results in an overstatement in the rises that have taken place in physicians' fees

A report was prepared by the Department and submitted to a special committee headed by Prof George Stigler of the University of Chicago, studying the Consumer Price Index The purpose of the report was to indicate the upward bias in the Consumer Price Index—particularly in prices reported for medical care because of failure to consider quality improvements The chief evidence provided concerns the treatment of ailments which can be completed in shorter time thereby requiring fewer patient-physician visits than formerly

The department has also gathered and interpreted data dealing with vital statistics, population and its composition, income figures, and cost figures, for physicians, private individuals and organizations other than the medical societies requesting the information

A study of the financial assets of the aged and Forand-type legislation was made and published in the *J A M A* Copies of this were distributed to state and county medical societies Numerous requests for additional copies have been filled

Also in the *J A M A* was a study entitled "Voluntary Health Insurance Payments for Short-Term General Hospital Stays of Aged Persons"

In addition to the above articles appearing in The Journal, an ideological elaboration of the "Freedom of Choice" concept was prepared and published in the *J A M A* as an editorial It will be reprinted in *The Freeman* for August, 1960

A review article of *The Constitution of Liberty* by F A Hayek, was published in THE JOURNAL

A paper dealing with an attempt to measure improvement in the quality of medical care was distributed to numerous national organizations, individuals, and physicians

A definitive study on "Medical Care Costs in an Extended Inflation" has been submitted to the *J A M A* for publication Requests for mimeographed copies have been received and copies distributed This study may be one of the first publications by the department for reporting year 1961 As a by-product of this work, several articles have been written and will be published in *The AMA News*

Copies of the following publications, talks, remarks, and comments prepared during the year ending June 30, 1960, may be obtained from the Economic Research Department

Bulletin 107	"Voluntary Health Insurance Payments for Short-Term General Hospital Stays of Aged Persons," by Walter Polner, Ph D
Bulletin 108	"Some Observations on Financial Assets of the Aged and Forand-Type Legislation," by Arthur Kemp, Ph D, Leonard W Martin, Ph D, and Cynthia Harkness, B A
M-121	"Economics of Illness of the Future," by Leonard W Martin, Ph D
M-122	"The Constitution of Liberty" by Arthur Kemp, Ph D
M-123	"Freedom of Choice" by Arthur Kemp, Ph D

"Trends in the Distribution and Organization of Physicians in the Practice of Medicine," by L W Martin, Ph D

"Achieving Better Understanding of Medical Care Costs," by Arthur Kemp, Ph D

"What Does the American Public Want in Health Care—As an Economist Sees It," by Arthur Kemp, Ph D

"Economic Status of the Aged," by Arthur Kemp, Ph D

Increasing Demands vs Increasing Costs,' by Arthur Kemp, Ph D
"Expenditures, Prices and Units of Medical Care,' by Leonard W Martin, Ph D
'A Critique of Relative Value Studies," by Leonard W Martin, Ph D
"Medical Care Costs in an Extended Inflation,' a study by Arthur Kemp, Ph D , and Mr Walter Livingston

Medical Service

The Department of Medical Service provides staff assistance to the Council on Medical Service In this capacity, it also serves the Committee on Aging, Committee on Insurance and Prepayment Plans, Committee on Medical Care for Industrial Workers, Committee on Indigent Care, Committee on Federal Medical Services, Committee on Medical Facilities, and the Committee on Maternal and Child Care

An account of the activities of the Council on Medical Service and its various committees is contained in their respective annual reports

Staff work in the field of aging and chronic illness included the following

(1) Conducted Regional Conferences on Aging in Boston, Minneapolis, Cleveland, Kansas City, San Francisco, New Orleans, Atlanta and Baltimore Including the Salt Lake City Conference held in May 1959, these projects involved the state medical associations of 48 states and the District of Columbia Total attendance at the eight conferences, consisting mostly of representatives of non-medical organizations, was in excess of 5,700
(2) Maintained close liaison with staff directors for the White House Conference on Aging, relaying pertinent information about national, regional and state planning for the conference to state medical associations In this connection a Conference for Medicine s Participation in the 1961 White House Conference on Aging was held in Chicago on April 22-23, 1960 In attendance were over 100 delegates representing 44 state medical associations In addition meetings were held with representatives of every co-sponsoring state medical association at a special session during each of the regional conferences on aging, and periodic consolidated memoranda were sent to all state medical associations advising them of developments pursuant to the White House Conference
(3) Assisted in preparation of testimony given before the House Ways and Means Committee on the Forand Bill, July 15, 1959, and Senator McNamara's Sub-Committee on Problems of the Aged and Aging June 16 and August 5, 1959 and April 4, 1960
(4) Prepared and published, on alternate months, the Chronic Illness Newsletter and the Homemaker's Services Bulletin The Chronic Illness Newsletter reports on various community programs for the prevention, care and rehabilitation of long-term illnesses The Homemaker s Services Bulletin contains information to promote the growth of homemaker services
(5) Worked with the American Hospital Association, U S Public Health Service, and Blue Cross Commission in developing a national inventory of home care programs in the United States
(6) Distributed exhibits and literature to state and county medical societies and para-medical groups

Staff activities concerning insurance and prepayment plans included the following

(1) Assisted in arrangements, planning, program development and securing participants for the three regional conferences of the Committee on Insurance and Prepayment Plans, and conducted similar activities in connection with the first National Congress on Prepaid Health Insurance, and the National Conference of Health and Welfare Plans, Trustees and Administrators Material presented at each of these conferences were edited and published
(2) Arranged the Joint Meeting of the Blue Shield Board of Directors and the Council on Medical Service, Nov 29, 1959, in Dallas, Tex
(3) Developed material and prepared copy for nine publications, including revision of two pamphlets on voluntary health insurance and five new brochures
(4) Maintained current data on programs being developed by Blue Shield and private carriers to provide medical-surgical-hospital coverage for persons over 65 Staff prepared a detailed summary of individual programs to accompany the Committee reports submitted to the House of Delegates at each session
(5) Worked with the American Hospital Association staff in studying developments that have occurred in connection with decisions of state regulatory bodies which may lead to the domination of medicine and hospitals through prepayment plan control
(6) Prepared, distributed and assisted in the analysis of questionnaires sent to state medical societies relative to the proposed group disability and group retirement or annuity program for A M A members
(7) Assisted the Personnel Department in preliminary analyses of the experience of the A M A employees health insurance benefits program
(8) Began a study of the steps which led to the establishment of the Canadian Federal-Provincial Hospital Insurance' Program

Staff work in the field of medical care for industrial workers included the following

(1) Conducted surveys, and composed reports and guides in matters effecting industrial workers Among these were Guides to Physician Relationships with Medical Care Plans, Survey of Management Health Centers, 1959, Survey of Physicians' Services in Small Plant Occupational Health Programs, and Background Report on Compulsory Retirement

(2) Collected data and maintain files on all varieties of medical care plans

(3) Attended three meetings with AFL-CIO representatives, and assisted in the development of two statements dealing with the role of the medical director and medical advisory committee in Workmen's Compensation jurisdiction

Staff work in the field of government medical programs and indigent care included the following

(1) Gathered and analyzed material on drug costs for welfare recipients

(2) Compiled material on "mail order" prescription programs, such as those of the American Association of Retired Persons and the National Epilepsy League

(3) Prepared a summary of the drug expenditure situation in the twelve states invited to send representatives to the Regional Conference of the Committee on Indigent Care, in Reno, April, 1960

(4) Prepared material for a joint mailing to all state medical and hospital associations urging improved financing and planning in local and state indigent medical care programs

(5) Worked with representatives of the American Hospital Association, Public Health Service, Blue Shield and Blue Cross in organizing and conducting a workshop on organized home care programs As a follow-up to this the organizations have worked together on a joint inventory of home care programs to be published in the fall

(6) Prepared background material for the study, "Impact of Government Financing on Health Care"

Staff work in the area of medical facilities included the following

(1) Reviewed present programs designed to provide training of ambulance aides

(2) Cooperated with representatives of the American Hospital Association, American Nursing Home Association, Public Health Service and Blue Cross Commission in developing material to be used in a workshop on Hospital-Nursing Home Relationships Staff worked with the above groups in the development of model by-laws for medical staffs in nursing homes

(3) Worked with Blue Cross and Blue Shield plans in obtaining information on the possibility of including nursing home services in prepayment plan benefits as a substitute for hospitalization and in-hospital medical care

(4) Completed analysis of material collected in the survey of nursing homes In connection with this, staff worked with American Hospital Association and American Nursing Home Association to develop a sound basis for accreditation of nursing homes either on a national or state level

(5) Developed a series of some 30 tables summarizing official health department programs and services

(6) Collected and evaluated various methods used by local community chests in distributing funds among hospitals

(7) Operated the Physician Placement Service Although state placement services are in many instances most efficient, the A M A Placement Service still has an important function to perform as a clearing house or central agency through which all openings may be available to physicians

(8) Compiled and analyzed data for the study of the relationship of physicians not-in-private practice to organized medicine This report (a) traces the growth both in the number and the influence of salaried physicians, (b) notes the A M A active membership record of physicians not-in-private practice, and (c) sets forth recommendations

Staff work in the area of maternal and child care included the following

(1) Helped organize a pre-conference meeting of physicians attending the White House Conference on Children and Youth

(2) Worked with staff of White House Conference on Children and Youth in preparation of the national meeting A member of the Department was on loan to the White House Conference for five months beginning in August, 1959 He aided in the preparation of pre-conference publications and served as a recorder of one of the conference's forums

(3) Served on a sub-committee on medical care problems, of the Committee on Services to Unmarried Mothers, of the Welfare Council of Metropolitan Chicago

The Department of Medical Service staff is concerned with a number of activities that do not properly fit under the areas mentioned so far in this report They include the following

(1) Attended five meetings of the Committee on Medical Practices and prepared various materials for discussion purposes, speeches for committee members at regional conferences and edited proceedings of two conferences

Two informational bulletins on Relative Value Studies have been issued for use by medical societies

(2) Served the Committee on Medical Rating of Physical Impairment and its sub-committees for six months preparing materials and supervising publications of Committee reports

(3) Maintained liaison with and attended meetings of the Medical Advisory Committee of BOASI in Baltimore In this capacity staff attended six meetings with representatives of BOASI during the preparation and development of a film entitled The Disability Decision"

(4) Completed a list of medical practices of three or more associated physicians published under the title 'Listing of Group Practices in the United States' This list is the basis for a future comprehensive directory on group medical practice In total the publication contains the names, addresses and number of associated physicians for 975 groups with a total physician personnel of 10,597

(5) Cooperated in a biennial survey to keep abreast of the various activities and projects being carried out by component medical societies

(6) Planned and developed material for the two meetings of the Committee on Relationships Between Medicine and Allied Health Agencies Staff compiled the data for a revision of the Handbook for Medical Services and Individual Physicians on National Voluntary Health Agencies'

The programs and activities of the various Councils and Committees of the Association which are staffed by the Legal & Socio-Economic Division are discussed in separate reports

THE WASHINGTON OFFICE

Organizational Structure—The Washington Office, composed of 22 employees, represents a geographical extension of four A M A Headquarters Divisions Communications Division, Environmental Medicine Division, Field Service Division, Legal and Socio-Economic Division, and the Office of the Executive Vice President In addition, the staff of the Washington Office includes a manager and an administrative assistant

Each staff member reports to his Division Director in Chicago, the manager of the Washington Office reports to the Executive Vice President

The programs and objectives assigned to the personnel of this office emanate from Chicago The accomplishments thereof are submitted to the respective Division directors, whereby they become incorporated into the monthly and annual reports of those Divisions Therefore this report will be of a general, rather than a specific, nature

Function—The primary function of the Washington Office is to keep abreast of the activities and trends in the Washington area which directly or indirectly affect the medical profession and the medical and health needs of the people of this country It acts as a listening and relay post in this regard

The duties of each of its sections are geared toward the realization of the primary function A synopsis of these duties follows

Communications Division—The Communications Division maintains liaison with the local news media corps, providing them with information concerning A M A policies and programs In addition, this Division contributes articles to the *AMA NEWS*, the *J A M A*, the *New Physician*, *Today's Health*, *GP*, and state medical journals The contributions submitted to the aforementioned publications concern events occurring in the nation's Capital that are of interest to the medical profession

Environmental Medicine Division—The Environmental Medicine Division maintains contact with the significant medical posts throughout governmental agencies and also services the A M A's councils and committees whose programs are related to the various departments of government

On Dec 1, 1959, Eugene V Jobe, M D, joined the staff as a medical liaison representative Dr Jobe, after 30 years of service retired from the Medical Corps of the U S Navy His duties with the Navy closely paralleled those of his new position with A M A

Field Service Division—The Field Service Division conducts liaison with members of the Senate, House of Representatives, and Executive Branch of Government

Legal and Socio Economic Division—The Legal and Socio-Economic Division studies legislative proposals of medical interest and prepares analyses of bills which are of specific interest to the A M A

The manager coordinates the diversified activities of these various sections and reports to the Executive Vice President

Activities

Medical Legislation—Since the submission of the previous annual report the program given priority by the Washington Office was the concentration of its efforts in the area of attempting to prevent further governmental inroads into the practice of medicine

The Washington Office, as a part of the team of A M A officers and staff, state and county medical societies, and allied groups, labored to bring to the attention of those who have power to enact laws, as well as to the public, the dangers of furnishing medical aid for the aged through the passage of hasty or ill-conceived legislation

The team fighting for the American way of life and the free-enterprise system happily witnessed the House Ways and Means Committee defeat the Forand Bill, H R 4700, the measure which would have brought about compulsory health care for the aged via the Social Security System After defeating the Forand Bill, the Committee and the House of Representatives, by an overwhelming majority, passed the Mills Bill, H R 12580. This measure proposed a new title, Title XVI, to the Social Security Act It provided health benefits for the aged by the matching of Federal and State funds, rather than by the Social Security method of financing H R 12580 spelled out local control as compared to central bureaucratic administration from Washington Following passage by the House, the Mills Bill went to the Senate Finance Committee where hearings were held The President-Elect of the A M A endorsed Title XVI of H R 12580 in testimony delivered on June 30 At the writing of this report, H R 12580 awaits further study and action by the Senate Finance Committee

Meetings and Conferences—The American Medical Association was represented by members of this office at numerous functions held in the Washington area sponsored by allied organizations, agencies of Government, and other groups whose activities are important to the interests of the Association

The staff watched most closely for Congressional hearings held on medical issues and attended them with the greatest regularity Proceedings of every pertinent hearing were immediately telephoned or teletyped to the Headquarters personnel

Information Service—On a daily basis this office received numerous and sundry inquiries and requests The subjects ranged from the recommendation of a physician to the A M A's official position on a particular legislative issue These communications, made by the public, branches of government members of Congress, medical societies, news media, schools, and others, affected the entire staff at one time or another

Generally, the answers were available by some segment of this office Often the library supplied the needed information But for some subjects it was felt that the Headquarters Office would be in a more advantageous position to furnish information in greater detail On such occasions the communications were forwarded to Chicago for reply

Speeches—Throughout the year, citizen and youth groups, colleges and medical societies of the local area invited the members of this office to talk on legislative issues pertaining to medicine The fulfillment of these speaking engagements was rotated among the staff

Visitors

Students—In addition to the traffic of visitors developed by the very nature of the liaison activities conducted by the Washington Office, it many times became host to individuals and groups with whom it had not maintained liaison

The lay groups that most frequently requested a visit to the Washington Office and a talk on the American Medical Association consisted of political science students of nearby colleges These students desired information regarding the A M A's organizational structure, goals, ideology, and in particular the A M A's participation in legislative activities In compliance with their requests, a member of the staff conducted meetings and covered each item, following which he encouraged discussion by the students

State Medical Delegations—Physicians, representing their state medical societies, made trips to Washington throughout the entire year to collectively call upon representatives in Congress They came for the express purpose of making known their views on pending legislation affecting the practice of medicine These delegations, prior to carrying out their missions on Capitol Hill, visited the Washington Office where conferences were held with the staff, at which time last-minute Congressional developments were discussed

Foreign Guests—During the period covered by this report, three physicians from foreign countries visited the Washington Office They were Dr Henry Downs, Australia's assistant director of General Health, Dr Thomas Gardner, Hon Secretary, Cumberland Division of the British Medical Association, and Dr Antoine Hosri, President of the Lebanese Medical Association

Each of these physicians came to the United States primarily to study our system of medical care

Library

The procedure was adopted to acquire for the Washington Office library only those reference materials which have a specific bearing upon its operation In the future, collections of medical periodicals and of allied subjects that can readily be obtained from the Library of Congress, the National Library of Medicine, the library at the Department of Health, Education, and Welfare, and elsewhere in the Washington area will be avoided

On Aug 10, 1959, this office acquired the services of Marguerite M Schwarz, Ph D, as librarian Shortly before her employment with the A M A, Dr Schwarz was associated with the national headquarters of the American National Red Cross Her position with this organization, for 14 years, was that of supervisor of its library and legislative reference division

Reports of Standing Committees of the House of Delegates

COUNCIL ON CONSTITUTION AND BYLAWS

This report contains references to amendments and proposed amendments to the Constitution and Bylaws which received the attention of the Council and the House of Delegates, together with general information relative to the Council's activities

Constitution

1 **Successor to the President**—Although certain changes in Article VII, Section 5, were made at the June, 1959, meeting, the House of Delegates subsequently requested the Council to give further consideration to the question of whether or not an individual may succeed himself as President of the Association after he has served six or more months in that position At the June, 1960, meeting, the Council recommended that the present provisions of the Constitution which prohibit such repetitions in office be retained This recommendation was adopted by the House

2 **Selection of Location of Meetings of House of Delegates**—The present provisions of Article X, Section 1, relate to the location of the Annual Meeting, not the Interim Meeting Furthermore, they require that the selection of the location be made only at an Annual Meeting, not at an Interim Meeting In order to facilitate the selection of the location of both the Annual and the Interim Meetings, the Council made the following recommendation to the House, in June, 1960

'(a) Amend Article X, Section 1 of the Constitution to read as follows

The House of Delegates and the Scientific Assembly shall meet annually and at such other times as deemed necessary or as provided by the Bylaws, in cities determined by the House of Delegates A constituent association desiring a meeting in its state shall submit an invitation in writing, together with significant data, to the Board of Trustees The Board of Trustees shall investigate all cities designated in such invitations and shall report to the House of Delegates, advising which possess the necessary facilities and conveniences for accommodating activities of the Association The dates and the city selected may be changed by the unanimous action of the Board of Trustees at any time, but not less than sixty (60) days prior to the dates selected for that session

The Council also proposed that Article X, Section 2, be deleted since it would no longer be necessary

These recommendations, having to lie over for one session before being acted upon, are to be considered by the House of Delegates at the 1960 Interim Meeting

Bylaws

1 **Enumeration of Reference Committees**—At the June, 1960, Meeting the House of Delegates amended Chapter XII, Section 4 (E), relating to the enumeration of the Reference Committees, so as to change the name of the Reference Committee on Hygiene, Public Health, and Industrial Health to the Reference Committee on Public Health and Occupational Health This change will be made in the next printing of the Bylaws It is currently in effect, however

2 **Selection of Location of Meetings of House of Delegates**—Consonant with the changes referred to above in Article X of the Constitution, the Council recommended that the second sentence of Chapter IX, Section 3 (A), be amended to read 'The House of Delegates shall hold one interim session each year' This recommendation is also to be considered by the House of Delegates at the 1960 Interim Meeting

Current Activities

When the Reference Committee on Amendments to the Constitution and Bylaws at the June, 1960, meeting was considering the Council's recommendation in relation to a successor to the President, it realized that present constitutional provisions go no further than the Vice President If the President, President Elect and Vice President were all to die, resign, or be removed from office, no one would be at the helm of the Association until the next Annual Meeting The Council was therefore requested to study this problem and to make a recommendation at the 1960 Interim Meeting This is being done

The Council, with the help of the staff of the AMA Legal and Socio-Economic Division, is continuing to study the Constitution and Bylaws as a whole for the purpose of pointing out areas that could or should be changed It is not ready to make any specific recommendations to the House at this time

Meetings

The Council met five times during the period covered by this report It also was represented at a meeting of the Board of Trustees Committee on

Miscellaneous Activities, the chairman of which is Dr Cleon A Nafe This meeting was called, in part, for the purpose of discussing the functions, composition and general activities of the Council on Constitution and Bylaws and to determine whether or not it maintained adequate liaison with the Board It was concluded that effective liaison and communications with the Board of Trustees do exist and that no changes in function, composition or staffing seem indicated at this time

Membership

One change was made in the membership of the Council After having served with the temporary Committee on Constitution and Bylaws and then the Council since its inception, the term of office of Dr Britton E Pickett, Sr, expired His Texas humor and the benefits of his long experience with organized medicine will be missed by the Council and the Association Dr William A Hyland, of Grand Rapids, Mich, who had been elected to his first full term in 1959, was elected chairman in his stead Dr George D Johnson, of Spartanburg, S C, was elected by the House to fill the vacancy created by the loss of Dr Pickett

The Council takes this last opportunity to wish Dr and Mrs Pickett a long and pleasant retirement

Respectfully submitted,
WILLIAM A HYLAND, M D, Chairman
WILLIAM D STOVALL, M D, Vice Chairman
WALTER E VEST, M D
WALTER C BORNEMEIER, M D
GEORGE D JOHNSON, M D
Mr GEORGE E HALL, Executive Secretary

REPORT OF COUNCIL ON MEDICAL EDUCATION AND HOSPITALS

The Council on Medical Education and Hospitals submits the following report covering the period from July 1, 1959, to June 30, 1960 This report is designed to present only those matters which are of particular importance for consideration by the House of Delegates A more complete report of Council activities has been prepared and will be available to members of the House of Delegates on request

Recommendations on the Functions and Organization of the Council on Medical Education and Hospitals

In June, 1960, at Miami Beach, the Council reported that a Committee composed of members of the Council, under the chairmanship of Dr John Z Bowers, had been engaged for several months in a critical review and study of the Council's activities The initial phase of this study has been concluded, approved by the Council with the concurrence of the Board of Trustees and is submitted herewith for the information and action of the House of Delegates

It is important to recognize the changes in medicine and medical education, particularly in recent years, that have affected the role of the Council As medical education in the United States has been strengthened, medical schools, in general, are themselves more cognizant of their problems and better able to solve them

Further, the Association of American Medical Colleges has grown greatly in strength and has assumed an important role in medical education in its own right and, as the occasion indicates, in consort with the Council on Medical Education and Hospitals

The program of the American Boards in certifying specialists has added further complexity to the operation of the Council,

The team approach to health and disease has brought increasing importance to related professions and technical areas The maintenance of high standards for these groups and the assurance that their work with patients is restricted to areas of complete competence is a responsibility of growing importance for the Council

Forecasting future problems as well as meeting existing needs is another responsibility of the Council The projected needs for more physicians during the coming years raises challenging problems

During the past few years, the American Medical Association has undergone several organizational changes which affect the work of the Council A new and dynamic Executive Vice President has been appointed The staff of the Council has been placed under the overall direction of the Director of the Division of Scientific Activities of the American Medical Association

These and many other important considerations have made it imperative for the Council on Medical Education and Hospitals to study carefully how it can serve most effectively the American Medical Association's traditional professional obligations in the area of medical education

Functions of the Council

Chapter XI, Section 10 (B) of the Constitution and Bylaws states "The functions of the Council on Medical Education and Hospitals shall be

(1) To investigate premedical, undergraduate and graduate medical education, hospitals and associated subjects,
(2) To suggest and aid in instituting means and methods for improving conditions in these fields, and
(3) To carry into effect such suggestions as may be made by the House of Delegates"

The Council believes that the functions as presently stated do not adequately delineate and specify the responsibilities with which it should be charged Therefore, the Council on Medical Education and Hospitals respectfully requests that the Council on

Constitution and Bylaws consider and present to the House of Delegates at the next Clinical or Annual Meeting a modification of Chapter XI, Section 10 (B) of the Constitution and Bylaws This modification should more carefully delineate Council functions and give due cognizance to such additional Council responsibilities as

(1) Fostering of high standards of education in the continuing education of physicians and in the allied health professions and services
(2) Informing not only the House of Delegates but also constituent and component societies (through their Committees or Councils on Medical Education) of the problems and developments in medical education and of the Council s activities
(3) Promoting programs to assure a continuing supply of well qualified physicians

Organization of the Council

The desire to elevate standards of medical education was a primary reason for the formation of the American Medical Association A Committee on Education was established at the first meeting in 1847 and was succeeded by a Council on Medical Education in 1904 Through the accomplishments of medical education and the role of the Council in them, it shares in a very real part of the fine history of the American Medical Association and its proud heritage Thus, election to the Council on Medical Education and Hospitals is one of the richest privileges which the American Medical Association can bestow on a physician At the same time, there should be assurance that all members of the Council are sufficiently well grounded by knowledge and experience in the programs of the Council to represent it effectively at any time on a wide variety of problems

Members of the Council also need to develop special knowledge and experience in particular areas of Council activities Because this has not uniformly been the case in the past, Council meetings have been too often ceremonial in nature and it has been necessary to call on the staff for an unusual amount of discussion and leadership

To better serve these ends and so that the Council can more effectively fulfill its assigned responsibilities, it has developed, with the concurrence of the Board of Trustees, a new committee structure Under this reorganization there has been created an executive committee and three working committees of the Council

(1) **Executive Committee** —The Executive Committee is composed of the Council Chairman (who also serves as chairman of this committee) and the chairmen of the three working committees This Committee is to be readily available for necessary interim decisions and for advising and consulting with the Secretary At each meeting of the Council, the actions of the Executive Committee must be presented and acted upon when indicated The Committee is to usurp none of the prerogatives vested in the Council
(2) **Committee on Medical School Activities** — Three Council members shall serve on this committee which will concern itself with the activities of the Council related to medical schools
(3) **Committee on Graduate Medical Education** —This shall consist of three Council members and the Committee will be concerned with the activities of the Council related to internships and residencies
(4) **Committee on Continuing Medical Education and Allied Health Professions and Services** — This shall be composed of three Council members who will concern themselves with Council activities in these two areas

It is recognized that more effective pursuit of the Council s objectives may warrant, in the near future, the creation of additional working committees When this becomes necessary, the Council will consider requesting of the House of Delegates an increase in the size of the Council so that committee responsibilities can be discharged efficiently It shall be a perpetual responsibility of the Council as a whole to assure that its organization is adequate to the best fulfillment of its tasks

The most important immediate charge to each Committee is to carefully review the Council s activities (or lack of them) in the Committee's assigned area and such other related areas as seem pertinent Each Committee shall report conclusions and recommendations as to specific goals and methods of achievement in relation to the overall objectives and assigned functions of the Council It is through this mechanism that the Council will complete the second phase of its self-study The last phase of the self-study is to be a never ending one, since each committee is charged with a continuing review of functions and methods of achievement in its assigned area

Appointments to these Committees will be made annually by the Chairman of the Council who will also designate the chairman for the Committees The Committees will report directly to the full Council and all committee recommendations will be acted upon by the full Council

The Council Secretary under the direction of the Council has reorganized the Council staff to provide for effective staff services to the Council Committees

Report on Matters Referred to the Council by the House of Delegates

At the meeting of the House of Delegates in Atlantic City in June 1959, Resolution 39, introduced by the Section on Anesthesiology, was referred to the Council on Medical Education and Hospitals, and the American Board of Anesthesiology, without specific action by the House at that time This resolution concerned the change in the requirements of the American Board of Anesthesi-

ology, whereby candidates for certification by the Board after July 1, 1965, would be required to have three years of approved residency training Following discussions between the staff of the Council and representatives of the American Board of Anesthesiology, the Board held an open conference on Dec 8, 1959, to which interested anesthesiologists were invited to present their views on this subject It seems apparent that the differing viewpoints among anesthesiologists regarding the proposed changes in Board requirements are being given every consideration The Council is confident that these differences will be resolved before the Board of Anesthesiology proposes specific changes in requirements for Council review and action

Resolution No 28, introduced at the Dallas meeting in December, 1959, by Dr Eustace Allen, Delegate from Georgia, pertaining to the inclusion of a course on the social, political, and economic aspects of the art and science of medicine in the medical school curriculum as adopted was amended to the effect that "the American Medical Association continue to use its influence to persuade medical schools to include in their curriculum a course on social, political and economic aspects of the art and science of medicine, and that the respective state medical societies be encouraged by the American Medical Association to offer their assistance to medical schools in the development of such a course of study"

At its meeting on Nov 1, 1959, the Liaison Committee of the Council on Medical Education and Hospitals and the Council on Medical Service considered this same subject and it was pointed out that such a survey was conducted and published by the Council on Medical Education and Hospitals in 1955 In connection with this study, the majority of the medical schools indicated that this field receives coverage in connection with such courses as public health, preventive medicine, medical ethics, social and environmental medicine, and legal and economic medicine, through lectures, conferences, and discussions by the dean, or by cooperation with local or state medical societies Specific allocation of time in 33 schools indicated that consideration of the economic aspects of medicine is assigned from a minimum of one to a maximum of 24 hours

The Liaison Committee of the Council on Medical Education and Hospitals and the Council on Medical Service was of the opinion that it would be more productive if a positive approach were made by developing through a committee of acknowledged leaders in this field a suggested outline for the teaching of social, political and economic aspects of the art and science of medicine When formulated this suggested outline will be forwarded to medical schools by the Council on Medical Education and Hospitals

Resolution No 37, introduced by the Section on General Practice at Miami Beach in June 1960, and Resolution No 36 introduced by Dr F L Land, Delegate, Indiana, in June, 1959, referred to the inclusion of obstetrics as a required element for all participants in the two year program for family practice It is planned that these resolutions will be reviewed by the Council with representatives of the American Academy of General Practice in the near future

Resolution No 16, introduced at the June, 1960, meeting, by the New York Delegation entitled "Medical Education in the United States" resolved that the American Medical Association review the basic policies of the Council on Medical Education and Hospitals, the purpose of such review to be to establish methods for the training of and increase in the number of practicing physicians devoted to the personal care of physicians This resolution was referred to the Council for its study and will be given consideration in connection with the further development of acceptable programs in the family practice of medicine

Resolution No 13, also introduced at the June, 1960, meeting, by the New York delegation, referred to the apparent widespread assumption that the medical profession, through its organizations, local and national, seeks to limit the number of medical students to be trained in this country, both by means of restrictive school admission policies and by opposition to medical school expansion and construction This resolution was referred to the Communications Division and the Council on Medical Education and Hospitals As indicated in the report of the Reference Committee, which was adopted, the Council believes that the intent of this resolution is already being implemented and continuing attention will be given to this matter

Special Study Committee

The Council directed specific attention since the Dallas meeting in December 1959 to carrying out the eight-point program assigned to the Special Study Committee A progress report of the activities of this Committee will be considered by the Council and presented in a separate report to the House of Delegates at this session

Career Information and Recruitment Activities

One of the most urgent problems now confronting the medical profession is how to assure a continuing and increasing supply of well-qualified students for our medical schools There have been several recent studies which have projected medical manpower needs Although the resulting estimates have differed in degree, they all indicate clearly that there will be required a significant increase in the number of physicians graduated to maintain the present ratio Recruitment of talented and dedicated students for medical careers is one of our foremost responsibilities, and it is in the medical profession's own interest to assume leadership in maintaining the continuing quality and expansion of its own ranks

With the cooperation of the Association of American Medical Colleges, the Council and the Communications Division embarked upon a major medical career information program for high school, colleges, and community audiences There is now available kit materials which include (1) a letter of transmittal, (2) a handbook Medicine as a Career , (3) a pamphlet, The Opportunities and Rewards of Medicine", (4) a 15-minute speech 'The Exciting Field of Medicine', (5) a brochure on I Am a Doctor motion picture, (6) a flyer on an exhibit entitled, "Medicine, The Most Demanding/Rewarding Profession", and (7) an order form

This career information has been widely distributed to all high school counselors, to colleges and to constituent and component medical societies

Medical School Accreditation

One of the more important liaison functions of the Council on Medical Education and Hospitals with the Association of American Medical Colleges is the continuing study of medical schools in the United States and Canada

In liaison with the Association of American Medical Colleges and for visits to Canadian medical schools in liaison with the Association of Canadian Medical Colleges, the following institutions were surveyed and approved during the academic year 1959-1960

University of Alberta Faculty of Medicine
University of Western Ontario Faculty of Medicine
Saint Louis University School of Medicine
Marquette University School of Medicine
University of Rochester School of Medicine and Dentistry
Seton Hall College of Medicine and Dentistry
Baylor University College of Medicine
University of Puerto Rico School of Medicine
University of Florida College of Medicine
University of Cincinnati College of Medicine
University of Mississippi School of Medicine
State University of Iowa College of Medicine
Dartmouth Medical School
Georgetown University School of Medicine

Provision of Medical Service for Paying Patients by Salaried Clinical Faculties of Medical Schools

Subsequent to adoption by the House of Delegates in June, 1956, of A Report On Private Practice By Medical School Faculty Members (submitted by the Council on Medical Service), efforts have been directed toward formulating the major policies contained therein into a statement that would receive the support of the medical colleges The following statement has been worked out through the cooperative efforts of the Council on Medical Service, the Council on Medical Education and Hospitals and the Association of American Medical Colleges

Although changes were made in the wording the Association of American Medical Colleges approved the principles embodied in this statement by vote of its membership in November, 1959 The Council on Medical Service and the Council on Medical Education and Hospitals have approved the statement as submitted and recommend it to the House of Delegates in the belief that it supports existing policies of the House and represents substantial agreement with the viewpoints of the medical colleges

The complexity of medical education today makes it necessary that the major clinical departments have a nucleus of faculty members whose primary interest, efforts, and responsibilities are in the teaching and research activities of the medical school In order to provide adequate clinical instruction, there must be available sufficient numbers of patients to permit students individually to observe work up, and study the progress of a variety of patients in the major clinical fields

The financial resources of most medical schools are not sufficient to offer salaries that alone are adequate to attract and retain the clinical teachers and investigators necessary to achieve the objectives of a modern teaching center It has become necessary therefore to develop methods for supplementing the salaries of many clinical faculty personnel who have chosen to follow academic careers In addition economic factors such as the extension of voluntary health insurance and expansion of welfare benefits have markedly decreased the volume of indigent patients that have traditionally served as a major resource in clinical teaching

Under appropriate circumstances these two problems—the need for supplementing salaries of clinical teachers and the diminishing number of indigent patients available for clinical teaching—may be resolved through extending the privilege of caring for paying patients to career clinical teachers in the medical school hospital where the patients will contribute to the teaching program

The recognized need for expanding educational facilities in medicine will require a proportionate expansion in the numbers of academic clinical teachers and in the numbers of patients available for clinical instruction

The Liaison Committee on Medical Education, representing the Executive Council of the Association of American Medical Colleges and the Council on Medical Education and Hospitals of the American Medical Association in cooperation with the Council on Medical Service of the American Medical Association have agreed that the care of paying patients in medical school hospitals by career clinical teachers is proper and appropriate provided

(a) That fees are established by the participating physicians
(b) That the income from fees is deposited in a separate fund
(c) That disbursements from the funds are made in accordance with a plan devised by the faculty members involved and approved by the university
(d) That the amount of medical service and the number of physicians providing such service are related to and limited by the educational and research requirements of the institution
(e) That proper limits are established for participating physicians so that there can be assurance that the care of paying patients will not detract from their primary teaching and research functions

The Internship

At the June, 1960, meeting, the House of Delegates approved a revision of the 'Essentials of an Approved Internship" to include a paragraph clarifying the content of the mixed internship This clarification specified that the components of the mixed internship could consist of two or three of the major elements included in the rotating internship that no assignment could be of less than two

months' duration, and that the major assignment should be from six to eight months' duration on a service for which the hospital also held residency program approval The revision permits hospitals and candidates to arrange the combination of services within the mixed internship most suitable to the desires of each, but requires that each proposed combination of services must be approved in advance by the Council On June 24, the hospitals currently conducting mixed internships were advised of this change in advance of its publication in the Essentials and were advised further that a full year would be allowed for program adjustment with compliance to take effect as of July 1, 1961

The National Intern Matching Program

For the past eight years, the Directory of Approved Internships has been made available to the National Intern Matching Program for republication as its directory This Directory contains performance figures for the past academic year and announces positions available for the coming academic year This year, the Council has made available to the National Intern Matching Program the entire Internship and Residency Number of THE JOURNAL so that graduating fourth year medical students will now receive not only the "Directory of Approved Internships" to use for matching purposes, but also the Directory of Approved Residencies, the American Specialty Board requirements, the Essentials of an Approved Internship and the Essentials of Approved Residencies

Family Practice Program

Interest has been expressed from many sources regarding inauguration of the Family Practice Program as approved by the House of Delegates in June, 1959 The Council staff is engaged in identifying those institutions well enough equipped with both personnel and facilities, including adequate outpatient services, so that the established "pilot programs" will yield performance data and conclusions upon which suitable "Essentials" can be written With the continuing interest in the establishment of sound, basic programs of no less than two years duration following graduation from medical school, it seems clear that successful inauguration of programs in family practice might lead, in some hospitals at least, to voluntary discontinuance of one year rotating internships This should provide the young physician a longer opportunity before making the decision to proceed with specialty training or to enter general practice While no specialty board should be expected to make a commitment at this time, it is anticipated that after the new programs are in operation sufficiently long, certain specialty boards may conclude that portions of such training are creditable toward qualification for specialty board certification It is possible that this new program might eventually become the basis from which all graduates would enter either the medical specialties or general practice A portion of the February, 1961, "Annual Congress on Medical Education and Licensure" will be devoted to the Family Practice Program and its many promising implications

Continuing Medical Education

The Ad Hoc Advisory Committee on Continuing Medical Education, appointed in 1956 for the formulation of a program of action whereby the Council can provide the greatest assistance in the continuing education of physicians, has met several times a year to consider recommendations for the future considerations of the Council in this field The committee assumed as one of its major responsibilities the task of preparing a statement of the "Objectives and Basic Principles of Postgraduate Medical Education Programs," as a guide for the information of individuals and organizations conducting, or planning to conduct, activities in this field The statement entitled "A Guide Regarding Objectives and Basic Principles of Postgraduate Medical Education Programs" was published in July 1957, following approval with minor revision by the House of Delegates

At its most recent meeting, in May, 1960, the committee reviewed its activities and in a resolution urged that the "Council on Medical Education and Hospitals (1) assume a greater interest in continuing medical education consonant with its interest in graduate and undergraduate medical education, (2) take a direct and affirmative stand which will dignify continuing medical education in the eyes of the profession, which would be a most immediately fruitful endeavor, (3) demonstrate its interest by the provision of suitable staff in order that constructive action may be initiated and continued, and (4) of all organizations it should have the prime interest in continuing medical education, although the Council could well enlist the cooperative interest and support of the Association of American Medical Colleges in its activities related to continuing medical education"

The Ad Hoc Committee at this same meeting considered at length the experiments with, some of the problems of, and the uses of television in post graduate or continuing medical education Although the Committee recognized that television cannot be effectively utilized as the sole medium of continuing medical education, television is an important function, and the Committee urged that the American Medical Association take leadership in exploiting the potentialities of this medium

Because of confusion both in the United States and abroad, inherent in the word "postgraduate" which is commonly thought to include in medicine all education after the granting of the M D degree including internships and residencies, the Committee recommended that the Council change the name

of any advisory committee it may have in the future to the Advisory Committee on Continuing Medical Education Furthermore, the Committee recommended that in any revision of the Guide Regarding Objectives and Basic Principles of Postgraduate Medical Education Programs' that the phrase "continuing medical education' be substituted wherever feasible and euphonious for the phrase postgraduate medical education"

In its further reconsideration of the Guide and its possible revision, the Committee recommended to the Council that Principle 4, reading

> 4 The curriculum of any postgraduate medical education program should be the result of thoughtful planning well in advance of the date scheduled for the beginning of the program

be changed to read as follows

> 4 The curriculum of any continuing medical education course should be designed to explore with considerable depth one subject or a closely related group of subjects The educational merit of devoting sufficient consecutive sessions to explore more than superficially the background and advances in one subject is emphasized The entire course or significant segments of it should be devoted to integrally related subjects rather than having the various hours concerned with unrelated material The curriculum of any continuing medical education program should be the result of thoughtful planning well in advance of the date scheduled for the beginning of the program

The Council voted to endorse the revision of the statement on "Objectives and Basic Principles of Continuing Medical Education Programs' including substitution of the word Continuing for Postgraduate" wherever feasible, and refers it to the House of Delegates for consideration with the recommendation for its approval and subsequent publication (Appendix A)

In receiving and accepting the balance of the report of the Ad Hoc Committee, the Council on Medical Education and Hospitals signified its intent to study carefully other recommendations of the Committee in the near future

Problems Related to the Foreign-Trained Physician

For the past several years, graduates of foreign medical schools have entered the United States in increasing numbers Basically, there are three distinct groups involved (1) alien citizens entering on temporary visas for limited periods of further medical study in United States facilities, (2) foreign-trained physicians entering as immigrants on permanent visas, and (3) American citizens who obtain their formal medical education abroad and return to the United States The establishment of the Educational Council for Foreign Medical Graduates along with State Board licensure requirements provide a means of rendering reasonable assurance that foreign trained physicians in the United States will not exert an unfavorable influence on medical care and medical education in this country

Organizations such as the Institute of International Education (which administers the Fulbright Program), certain philanthropic foundations (such as Rockefeller, Kellogg, China Medical Board, etc), certain government agencies (International Cooperation Administration, Division of International Health of the United States Public Health Service, etc), and such other organizations as the National Committee for the Resettlement of Foreign Physicians have concerned themselves with the selection, guidance, orientation and placement of foreign physicians, students, and faculty These efforts in general have been directed toward assuring that individuals coming to this country for further education are the ones who will most likely bring the greatest educational gain to their country of origin At the same time, the placement of these in the appropriate educational environment in the United States has been given due attention

Unfortunately, these many organizations have been involved with only a small fraction of the total foreign physician population coming to this country These necessary and meaningful services for the most part have not been available to the two largest groups, those here on temporary visas accepting posts as interns and residents and those entering on permanent visas with the intent of following a professional career in the United States Although the program of the Educational Council for Foreign Medical Graduates provides a selection process, there is at present no adequate mechanism for providing the great bulk of foreign physicians coming to the United States for further training (and in some instances ultimately for medical practice) any kind of guidance and orientation to the American scene, nor advice and counseling in regard to the most appropriate educational opportunities available This has been and remains the greatest detriment to fulfillment of the intent of the educational exchange program As a result, much if not most of the medical exchange that is now taking place is unrelated to the educational needs and medical practices of the sending countries This situation does not promote international good will and does not effectively foster improved medical standards

What Remains to be Accomplished? In the best interests of all concerned, there should be created a central agency to (1) collect and disseminate information concerning the activities of the many groups involved in this complex field, (2) coordinate these activities, and (3) provide necessary services now missing

This needed central agency should be established through the joint efforts of the many organizations

and agencies now involved with educational exchange in medicine and those which have an interest and responsibility in standards of medical education and practice in the United States Initial discussions should involve among others the American Medical Association, the American Hospital Association, the Association of American Medical Colleges, the Federation of State Medical Boards of the United States, the Institute of International Education, United States Department of State, Department of Health, Education and Welfare, and the Educational Council for Foreign Medical Graduates Among matters which should be of early concern in these discussions are

(1) The formation of a central coordinating agency as mentioned above,

(2) A study of the educational capacities of medical facilities in the United States which would be of value in elevating the level of medicine in other countries while at the same time preserving the existing strength of United States medicine

(3) A study of the means by which all graduates of foreign medical schools coming to the United States can be given appropriate advice and guidance regarding educational opportunities In each instance, this should be related to the specific needs and aspirations of the sending country

(4) A study of the means by which all foreign physicians coming to this country can be best oriented to the American environment so that the social and cultural aspects of exchange can be exploited

(5) A study of means by which physician immigrants can be given placement guidance in keeping with their own wishes as well as the needs of the nation

(6) A study of the reasons for and benefits and losses to be derived from the number of United States students now studying medicine abroad

Under direction from the Board of Trustees the Council is now studying the various facets of this problem, and as an initial step has scheduled a conference with interested agencies to arrive at a workable program for the future

Changes in Council Membership

The Council would like in this annual report to express its appreciation to Dr James M Faulkner for outstanding service rendered during the years 1952-1960 as a member of the Council and as its vice chairman from 1957 to 1959 At considerable sacrifice to his private convenience and pursuits, he contributed his wise counsel on the behalf of organized medicine to the improvement of medical education in the concerted interest of the profession and of the public

The Council welcomes to its membership Dr William R Willard, Dean and Vice President of the University of Kentucky School of Medicine, Lexington, who was elected a member of the Council by the House of Delegates in June 1960 The deliberations of the Council will be enhanced by Dr Willard's breadth of knowledge and experience

Doctor Edward L Turner

The Council on Medical Education and hospitals wishes to record in this annual report the following tribute to Doctor Edward L Turner which was adopted by the Council on Feb 8, 1960 following his death on Feb 4 Dr Turner served as Secretary and administrative officer of the Council from October, 1953, to February, 1959, when he was appointed Director of the Division of Scientific Activities

Tribute to Doctor Turner

In times of sadness it is customary for groups of men to turn to resolutions memorializing their departed colleague

There are some men for whom a resolution does not appear fitting

Such a man was Edward Turner, warm and sympathetic, sensitive to the needs and feelings of others, a true gentleman For that reason his colleagues of the Council on Medical Education and Hospitals express their feelings now, not in a resolution, but in a simple statement

Edward Turner was the embodiment of what most physicians desire to be, the epitome of what we picture our students to be in their mature years

He was a scientist, educated and skilled in the techniques of one of the traditional sciences basic to the study of medicine

He was a teacher, as all doctors should be, intensely interested in passing on his knowledge to others, in preparing young men for a full life such as his was

He was an administrator of rare talents, a leader in medicine He progressed from one position of prominence to another, to ever-increasing responsibilities, not as a result of driving ambition but as a result of deep and abiding aspirations for medicine

A man of great stature, he was self-effacing, content in the knowledge that if something were accomplished, where the credit was given was meaningless

He was a complete physician But, most important, he was a sincere friend

His colleagues now extend to his beloved wife and family their deep sympathy in the loss which all have sustained, their grief lightened by the knowledge that American medicine is the better for Edward Turner having been a part of it

Appreciation

The support, encouragement and cooperation which the Council has received from the officers, Board of Trustees, members of the House of Delegates, Directors of the Divisions, other Councils, Bureaus and Departments of the American Medical

Association, as well as that of the many organizations and agencies with which it has worked during the past year, are most sincerely appreciated

Respectfully submitted,
LELAND S MCKITTRICK, M D, Chairman
W CLARKE WESCOE, M D, Vice Chairman
WARDE B ALLAN, M D
JOHN Z BOWERS, M D
W ANDREW BUNTEN, M D
GUY A CALDWELL, M D
JOHN W CLINE, M D
HARLAN ENGLISH, M D
CHARLES T STONE, M D
WILLIAM R WILLARD, M D
WALTER S WIGGINS, M D, Secretary

Appendix A
A Guide Regarding Objectives and Basic Principles of Continuing Medical Education Programs

Preface

Physicians have become increasingly concerned with their need for effective continuing educational opportunities in order that the advances in medical knowledge may be applied in practice with as little delay as possible Though this need has been clearly recognized, there has been a lack of basic guidance regarding what educational approaches would be most useful Continuing medical education poses a variety of problems Although a few are unique, many of the problems are similar to those that confronted other phases of medical education earlier in this century

In order to best explore the problems and useful approaches to their solution, the Council on Medical Education and Hospitals of the American Medical Association decided that it should have the advice of leaders in the profession having a diversity of backgrounds and viewpoints in practice and in medical education Accordingly, early in 1956, the Council sought and obtained from the Board of Trustees of the American Medical Association authorization to appoint an Ad Hoc Advisory Committee on Postgraduate Medical Education This committee, which began its task in April, 1956, and is still at work, is composed of the following members

D Clarence E de la Chapelle, Professor of Medicine and Associate Dean, New York University Post-Graduate Medical School
Dr John Conlin, Medical Director, Boston City Hospital
Dr Mahlon Delp, Professor of Medicine and Chairman of the Department of Postgraduate Medicine, University of Kansas School of Medicine
Dr William B Hildebrand, general practitioner and Former President, American Academy of General Practice
Dr James T Howell, Assistant Medical Director, Henry Ford Hospital, representing Dr Edwin Crosby, American Hospital Association
Dr Harold Jeghers, Professor and Director of the Department of Medicine, Seton Hall University School of Medicine
Dr Matthew R Kinde, Director of Division of Medicine and Public Health, W K Kellogg Foundation
Dr Samuel Proger, Professor and Chairman of the Department of Medicine, Tufts University School of Medicine, and Physician-in-Chief, New England Medical Center
Dr John Sheldon, Professor of Medicine and Director, Department of Postgraduate Medicine, University of Michigan School of Medicine
*Dr Cassius J Van Slyke, Associate Director, National Institutes of Health
**Dr Edward L Turner, Secretary, Council on Medical Education and Hospitals, American Medical Association
Dr John C Leonard, Chairman of the Committee, Director of Medical Education, Hartford Hospital

*Dr Glen R Shepherd, Assistant Secretary of the Council, is serving as staff for the committee The committee was asked to examine postgraduate continuing medical education in its broadest aspects and to recommend to the Council a course of action that the American Medical Association could take that would be of assistance in increasing the educational stature of this field At the outset of the committee's deliberations, it became apparent that a basic guide needed to be formulated and published by the Council, a guide that would be applicable to courses as well as to other approaches such as community hospital—medical school cooperative efforts The following material is the product of this part of the committee's work

It is very gratifying to report that from its beginning the committee has pursued its task with extraordinary vigor and enthusiasm bespeaking the importance of the subject of its study All members of the committee have participated actively in its deliberations, and each member made a significant contribution to this outcome of the committee's work

The Objectives and Basic Principles of Continuing Medical Education formulated by the committee and endorsed by the Council is a major contribution to an initial clarification of goals and guiding principles in this continuing phase of medical education On behalf of the Council it is my pleasure to express deep appreciation to the members of the committee for the important work they have completed to date and to commend this document

*Resigned 1960
**Deceased 1960

to all concerned for thoughtful study and active attention

Feb 9, 1957

Introduction

The purpose of this publication is the presentation of objectives and basic principles of continuing medical education programs for the guidance of those active in this field as well as for those desiring to initiate courses and other programs for the continuing education of physicians

Vital new discoveries are of little immediate use against human disease until physicians in practice learn about them Regardless of how well prepared a physician may be at the time of entering practice, the adequate knowledge of yesterday is not fully adequate today How best to meet this educational challenge is the broad problem of continuing postgraduate medical education

The American Medical Association and its Council on Medical Education and Hospitals have become increasingly concerned with the educational activities and needs in this continuing phase of medical education It is apparent that formal courses are only a part of the educationally significant programs in this field

In 1952, the Council initiated a study of the field of continuing medical education, the results of which were reported by Dr Douglas Vollan in The Journal in 1955 [1]

A physician adds to his knowledge by participation in the following activities (1) reading of the medical literature, (2) consultations with colleagues, (3) hospital staff meetings and conferences, (4) local, state, and national meetings of general and specialty medical societies, (5) formal continuing courses, and (6) regional-hospital-medical school educational programs

The educational implications of reading the medical literature, consulting with colleagues, and medical society meetings are significant, but they are under the direct control of the individual physician The enormous and increasing bulk of medical literature on even relatively restricted subjects makes difficult the maintaining of a current knowledge by this means alone The routine medical society meetings are often of necessity not primarily educational

Continuing education programs by hospitals, medical schools, and medical societies, on the other hand, involve groups of people and educational techniques having close analogies with basic and specialty medical education All three phases of medical education may involve the same educators

1 Vollan, D Postgraduate Medical Education in the United States, *J A M A* **157:**703-708 (Feb 26) 1955, ibid **157:**912-920 (March 12) 1955, ibid **157:**1119-1125 (March 26) 1955, ibid **157:**1302-1309 (April 9) 1955, ibid **157:**1492-1498 (April 23) 1955, ibid **158:**39-43 (May 7) 1955, ibid **158:**184-187 (May 21) 1955, ibid **158:**395-399 (June 4) 1955

It is with such programs—formal courses and regional hospital—medical school cooperative educational efforts—that the Council on Medical Education and Hospitals hopes to be of assistance

The basic problems confronting those who plan programs for the continuing education of physicians are analogous to the problems that faced those responsible for basic medical education fifty years ago and that concerned specialty medical education more recently These problems include (1) a lack of clear definition of objectives, (2) a wide range in the educational value of the courses and other programs offered, (3) insufficient opportunities for physicians to participate in educationally sound programs, (4) difficulties in financing, and (5) lack of national guidance and inadequate sharing of experience for those desiring to establish or improve continuing medical education programs

The Ad Hoc Advisory Committee on Postgraduate Medical Education described in the Preface has prepared and the Council endorses the Objectives and Basic principles for continuing Medical Education Programs as set forth in the following pages These principles are applicable, as the explanatory notes suggest, to any concerted educational effort involving physicians This publication is an initial step in a long-range program that the Council will pursue to assist in the further development of continuing medical education After a suitable period following publication of this guide, a continuing appraisal of postgraduate programs may be initiated

Objectives

The ultimate aim of continuing medical education is to make it possible for each physician to use in his practice the modern medical knowledge that continuously becomes available Adequate professional growth ensues through the participation of each physician in suitable programs of continuing education in addition to his own experience and reading

Postgraduate educational programs should as a result of current advances in the basic science and clinical fields favorably augment and modify an adequate initial education These programs should make possible the acquisition of such new skills in the field of original competence as scientific advances require All continuing education should strengthen the habits of critical inquiry and balanced judgment that denote the truly professional and scientific man

Basic Principles for Continuing Medical Education Programs

1 *There should be ADMINISTRATION of the continuing education program by a responsible person having the respect and support of the professional staff of the organization or institution, an administration having as its goal an educational*

program in the highest interest of the medical profession, as epitomized in the Objectives previously stated There should be continuity of administration, evidence of careful advance planning of the program, and a suitable voice by the teaching staff in the postgraduate program

The majority of medical schools express a sense of responsibility for the continuing education of physicians To implement their programs, some schools have appointed assistant deans for postgraduate medical education, or directors of departments, sections or committees charged with over-all planning and coordination of such continuation education [2]

The assistant dean or director has such responsibilities, in consultation with the dean and/or executive committee of the faculty, as determining the specific needs and desires of the profession in the region for the subjects of courses and other programs, stimulating the faculty to plan programs well in advance, making certain that the facilities needed will be available at the time scheduled, supervising adequate enrollment records in courses, serving as liaison with local and national medical societies, and otherwise coordinating the resources of the school for their most effective use in the continuing education program undertaken Continuous administrative supervision of the program by a responsible person results in a higher quality educational experience than is otherwise possible

Hospitals have found effective the designation of a director of medical education to be concerned with supervision of internship and residency programs Such an individual could become the executive officer of the continuing education program of the hospital, serving in a similar capacity and for similar purposes as the director of the continuing education program in a medical school

Any cooperative educational effort between a regional hospital and a medical school should have the understanding and approval of the medical staff, administrator, and trustees of the hospital as well as the understanding and approbation of the dean and the executive committee of the faculty of the medical school

Where a hospital or medical school is nearby, medical societies and other organizations concerned with cosponsorship of educational programs for physicians may find it best to work cooperatively with the hospital or medical school as the actual location of the program because of the personnel and facilities uniquely available there The advantages of administrative continuity of such relationships by a medical society or other organization are at least partially as compelling as is such continuity of administration for hospitals and medical schools

2 Fifty sixth Annual Report on Medical Education in the United States and Canada by the Council on Medical Education and Hospitals of the American Medical Association *J A M A* **161** 1666-1667 (Aug 25) 1956

2 *The BUDGET should be adequate to the educational program undertaken and to its continuing improvement*

Sole dependence upon tuition fees tends to restrict unduly the quality of continuing education courses In general, therefore, support for such activities should not be confined to anticipated income from tuition, and other financial resources should be available

The support of adequate courses and regional cooperative programs necessitates the furnishing of faculty personnel, certain special teaching facilities for physicians attending courses, transportation factors involved in regional and circuit programs, honoraria, and administration, the total support of which is in excess of tuition income alone It is important that the faculty personnel be sufficient to continue to provide an adequate program of basic medical education when the continuing education program is in effect

Hospitals expend funds for the salaries of directors of medical education when they are full time, for travel expenses of residents and interns to the medical school when that is a part of the program, for special facilities such as adequate library, conference rooms and audio-visual equipment needed in the various programs, and for assistants

3 *The TEACHING STAFF should consist of physicians and their associates of proven ability, training, and experience with an interest in and dedication to the development of carefully planned educational programs in the best current intellectual and professional interest of the participating physicians*

There should be an adequate number of instructors for each program to permit the use of the more effective participative methods of education (see Principle 6) In the other phases of medical education and in other fields of education, the number of students per teacher becomes much smaller as education becomes more advanced This would seem to have significant implications in continuing medical education

Instructors participating in any course or other educational program should be capable of providing explanation of the basic science mechanisms of health and disease and their clinical applications in the prevention, diagnosis, and treatment of disease The essence of professional knowledge, as compared to purely vocational, is understanding of the basic sciences to provide a "know-why" as well as a "know-how" of the practice of medicine

The resident staff of a hospital, and particularly of a regional hospital may form a valuable part of the teaching personnel of a continuing education program It is generally considered that the attending staff of a hospital in its contacts with interns and residents in an approved program stimulates and educates the resident staff It is also true that the intern and resident staff coming recently from

the research and teaching ferment of a medical center can stimulate and inform the attending staff of a community hospital Such a two-way exchange of ideas and mutual ignition of curiosity is implicit in any effective graduate educational program It is at times difficult to delineate clearly whether the graduate or postgraduate medical education implications are the greatest in various features of some of the existing and experimental ventures between regional hospitals and medical schools The benefit to the attending staff is directly related to its wholehearted participation in the various conferences, ward rounds, and other activities of the program

4 *The CURRICULUM of any continuing medical education course should be designed to explore with considerable depth one subject or a closely related group of subjects The educational merit of devoting sufficient consecutive sessions to explore more than superficially the background and advances in one subject is emphasized. The entire course or significant segments of it should be devoted to integrally related subjects rather than having the various hours concerned with unrelated material The curriculum of any continuing medical education program should be the result of thoughtful planning well in advance of the date scheduled for the beginning of the program*

In the case of courses, this advance planning should include selection of the general subject(s), the hour by hour schedule of topics and activities, the assignments of these to specific members of the teaching staff, and the selection of the appropriate methods of education

The value of an educational program depends to a considerable extent on the amount of thoughtful planning that occurred months in advance of its beginning Even continuous cooperative efforts, between hospitals and medical schools require periodic self-appraisal of the purposes, the methods of education, and the teaching staff Advances in medicine are occurring so rapidly that no course or other program should be repeated annually without such restudy

Thoughtful planning also means that the content of courses and other programs should be based upon the demonstrated needs and wishes of the physicians of the region, as well as upon advances in medicine The means of ascertaining the needs and wishes of physicians will vary Of great assistance is a close and cordial liaison among medical societies, medical schools, and hospitals of the region

Attention to the newer knowledge of the basic mechanisms of disease and of treatment should be a part of continuing education programs along with the more immediately applicable information

It is desirable that more institutions and organizations responsible for courses and for regional hospital programs design their content so that advances in all the major areas of medicine can be covered every four to five years Cooperative planning in each region would be of assistance in this respect

Postgraduate courses which by their duration and nature cannot fully prepare any physician for entering the practice of a specialty should be so structured in all subjects and especially those of the surgical specialties that the physicians participating will fully realize the dangers of using limited knowledge without restriction and without consultation It is because of the hazards involved that continuing education courses on surgical techniques often are limited to enrollment of those who have had adequate basic education in surgery The longer period of study needed for surgical practice is best spent in approved programs of specialty medical education rather than in short continuing education courses There is much information regarding diagnosis, the indications and contraindications for surgery, the basic science involved in such therapy, and the expected outcome of various surgical procedures that should be made available to all physicians

5 *There should be available FACILITIES that encourage participative methods of education Though lectures by professionally well-qualified speakers are a means whereby physicians obtain information, it is felt that such a method of education cannot alone provide an adequate continuing education program in the context of modern education The facilities mentioned above should include the availability, when appropriate to the content of the program, of patients and their case records and other necessary records such as roentgenograms, electrocardiograms, surgical pathology tissues and/or reports, laboratories, library, conference rooms, classrooms, and audiovisual aids, all adequate for and suitable to the specific program*

The facilities stipulated are those found in hospitals and medical schools Short courses sponsored or cosponsored by other organizations could well cooperate with nearby hospitals and/or medical schools in order to utilize their facilities

6 *The EDUCATIONAL METHODS should include more than a series of lectures or panel discussions in which the physicians are primarily passive recipients Methods requiring active participation include live clinics and bedside rounds, seminars, open question periods, laboratory work, and study of patients under supervision*

There is ample evidence in the basic and specialty phase of medical education that overemphasis on purely didactic methods provides an educational program that is inferior to one requiring active participation

It should be noted that any potentially active method of education, such as ward rounds, can become a purely passive exercise if a group is too large, e g, bedside groups of 6 to 8 physicians

would be likely to encourage a participation of each, while bedside groups of more than 10 might easily consist of "standing lectures"

Strictly as aids to education rather than as the sole method, the use of colored slides, motion pictures and color television is encouraged In the case of home study courses, the use of audio-visual kits may be of value However, the import of television to medical education is still in the exploratory and experimental phase

One of the major problems in continuing medical education is lack of concern for the methods of education used This is particularly true of courses, according to a study of the 1955-1956 offerings made by the Council on Medical Education and Hospitals In the Annual Report on Medical Education in the United States and Canada,[3] the section on continuing education courses summarized this data as follows The more active participative methods of instruction were used in 84 7% of the postgraduate courses offered by hospitals, 59% of the courses offered by medical schools, and in only 22% of the courses offered by medical societies"

When lectures are utilized, it is valuable also to conduct group discussions and question-answer sessions as follow through techniques Similarly, though appropriate audiovisual aids are of assistance, they should be simply a part and integrated into a planned educational program Catalogues containing lists of suitable motion pictures and their sources are available from the Director of Medical Motion Pictures and Television, American Medical Association, 535 N Dearborn St, Chicago 10

Surgical galleries and demonstration of surgical techniques to large groups of passive spectators leave much to be desired and also fall short of fulfilling educational needs It is conjectural whether even skilled surgeons can add techniques to their armamentaria simply by watching other surgeons at a distance It would seem that some modification of the medical traineeship or residency applicable for the practicing physician could be developed Thus surgeons desiring to learn a new procedure might have opportunities to perform it repeatedly under the supervision of its originator or his protege in a manner providing a significant educational experience

The patients of physicians on the attending staff of community hospitals can be utilized in a program of continuing education if the other facilities and a teaching staff are provided, perhaps in part by cooperative arrangements between the regional hospitals and medical schools Such education, if carefully planned and enthusiastically put into effect by the attending staff of the regional hospital, would be more truly continuous education and thus more valuable than is likely to be the effect of sporadic study in formal courses However, both kinds of programs—formal courses and regional hospital—medical school cooperative efforts—are necessary to meet the over-all needs of the profession

7 *METHODS OF EVALUATING the effectiveness of continuing education programs should be developed*

Experiments directed toward ways of better accomplishing such evaluation are encouraged Evaluation should be concerned with the long term effectiveness of various programs as well as the more immediate improvement in the knowledge of those participating There are possibilities, for instance, through use of medical audits to evaluate results of courses and other educational programs in terms of better patient care Such audits in themselves may have educational implications

8 *Each PHYSICIAN'S REWARD for participation in continuing medical education always should be his improved ability, to care for his patients and the stimulation of his own spirit of intellectual adventure*

Any certificate granted at the completion of a continuing education program or series of programs should not be nor resemble a diploma attesting to special skill nor be reasonably susceptible of such interpretation Continuing medical education is not intended to provide an educational experience adequate for beginning the practice of a specialty or subspecialty That is the concern of graduate medical education, i e, residency and fellowship training Therefore, it would be inappropriate for any document attesting to continuing education study to be subject to misinterpretation

Summary

The basic principles of continuing medical education are the same as are those of basic and specialty medical education In addition to students, an effective program requires leadership, careful planning, suitable facilities, and effective teachers who use dynamic methods of education that enlist the participation of the student For too long, the methods and facilities found lacking 50 years ago for effective basic medical education have continued to be employed in many continuing education courses and in some other activities labeled as educational for physicians

The Council on Medical Education and Hospitals expects that publication of this guide will be the first step in a long range program that will be of assistance in the improvement and increase of continuing educational activities After a suitable period following publication of this guide, a continuing appraisal of postgraduate programs may be initiated

3 Fifty sixth Annual Report on Medical Education in the United States and Canada by the Council on Medical Education and Hospitals of the American Medical Association J A M A **161**:1668-1669 (Aug 25) 1956

REPORT OF THE COUNCIL ON MEDICAL SERVICE

The Council on Medical Service is a standing committee of the House of Delegates, elected on a regional basis to provide for geographical representation It consists of nine elected members and the immediate Past President of the Association

The functions of the Council are listed in detail in the Bylaws In general, these are related to collecting, studying, analyzing, and reporting on developments in medical care, particularly as they relate to private medical practice Conclusions and recommendations are reported to the House of Delegates at each Clinical Session and, where necessary, to the Board of Trustees in between sessions of the House To assist in carrying out the Council's functions, the House authorized the creation of seven committees, each composed of physicians interested and knowledgeable in one of the fields of medical service The Council and this House owe a real vote of gratitude to these 45 physicians and the consultants selected to advise them Because of their interest in American medicine, these physicians give freely of their time and spend many hours in reviewing accumulated data and deciding how the profession can best provide the American people with the highest quality medical care

As in the past, this report is made under committee titles, and wherever recommendations have been made, they have the approval of the Council The period covered by the report is from July 1, 1959, to June 30, 1960

COMMITTEE ON INSURANCE AND PREPAYMENT PLANS

There were two changes in Committee membership during the year Drs Percy E Hopkins of Chicago and Milford O Rouse of Dallas, Tex resigned by virtue of their being elected to the Board of Trustees and Vice-Speaker of the House of Delegates, respectively Drs George Slagle of Battle Creek, Mich and Harvey Renger of Hallettsville, Tex are the two new members Other members are Drs Carlton E Weitz, Chairman, Buffalo, N Y, H Russell Brown, Watertown, S D, Gerald D Dorman*, New York, N Y, Quentin Kintner, Port Angeles, Wash, W Vinson Pierce, Covington, Ky, T Eric Reynolds, Oakland, Calif, and Donald H Stubbs, Washington, D C Staff members are Mr George W Cooley, Secretary, Mr Howard O Brower, and John Rowland

The Committee is also fortunate in having 10 consultants, identified in the Council's Supplementary Report during the 1959 Annual Session This group of consultants composed of both physicians and one non-physician, experts in various fields of health insurance (prepayment plans, life, disability and professional liability) brings a wealth of talent to the deliberations of the Committee and in turn to the Council

Projects and Activities Completed

Meetings—The Committee held five scheduled meetings Denver in July, 1959, Portland, Ore in August, 1959, Minneapolis in November, 1959, and Chicago in January and May, 1960

Three of the meetings were held in connection with regional conferences and one in conjunction with the May 13-14, 1960, National Congress on Prepaid Health Insurance Summary reports of the regional conferences and National Congress have been made to the House on previous occasions Proceedings of two of the regional conferences and the National Congress have been published To the extent supplies permit, copies are available upon request to the office of the Council on Medical Service

In addition to the scheduled meetings just mentioned, Committee members also met with the Board of Trustees' Medical Disciplinary Committee to discuss areas of mutual interest and with the Committee on Medical Care for Industrial Workers regarding the proposed development of "Suggested Guides" for physician relationships with medical care plans A more detailed report concerning this activity will be included in the report of the Committee on Medical Care for Industrial Workers

The Council and some members of the Committee met with representatives of Blue Shield Medical Care Plans during the Clinical Session in Dallas and with representatives of the Medical Relations Committee of the Health Insurance Council at the time of the 1960 Annual Session in Miami Beach

American Medical Association Support of Blue Shield—At the Dallas meeting five states collaborated in introducing Resolution No 42 reaffirming American Medical Association support of the Blue Shield concept This was adopted, and the Council on Medical Service was instructed to prepare and submit to the House of Delegates at the June, 1960, meeting its recommendations as to a full statement of policy with respect to the American Medical Association's relationship with Blue Shield plans Report A of the Council at the 1960 Annual Session in June contained a complete report on Resolution No 42 and a delineation of the Blue Shield concept and with recommendations for more active support of Blue Shield

Simplified Claim And Underwriting Forms—Previous reports to the House of Delegates commencing in 1954 have indicated the continuing efforts to simplify insurance medical claim forms Previously, six forms have been reviewed and approved During this year the Committee and the Council approved another simplified "all purpose"

*Elected to the Board of Trustees in June 1960, and has agreed to serve until a successor is appointed

claim form, which was developed by the Health Insurance Council It is identified as Attending Physicians Statement COMB-1 This new form is designed to combine in a single form the questions contained in the other forms approved previously Several printing firms have published these forms to make them available to physicians on a quantity basis A list of the various sources through which these forms can be obtained in quantity is available through the Council office

A new activity with respect to insurance forms requiring medical opinion was the approval by the Council of simplified underwriting forms to be used for medical examinations in connection with life and non-cancellable accident and health insurance and the approval of a simplified claim form for administration of industrial disability (loss of time) insurance benefits

Advertising Criteria—At the suggestion of the Business Division, the Committee was requested to develop criteria which could be used by American Medical Association publications in determining the acceptability of accident and health insurance advertising In this project, the Committee and its consultants reviewed the Rules Governing Advertisements of Accident and Sickness Insurance' promulgated by the National Association of Insurance Commissioners As a result the aforementioned rules were recommended as guides with minor modifications deemed justifiable to make advertising copy directed primarily to professional persons, conform to more stringent standards Unlike other advertising criteria suggested only for scientific publications, the criteria in this instance were submitted to the Advertising Department in the hope they would be applicable to all publications of the Association

"Let's Use, Not Abuse Health Insurance"—Most members of the House of Delegates are aware of the above-captioned policy statement adopted in 1958 To publicize this, the Communications Division published a pamphlet based on the policy statement developed earlier by this Committee and the Council and designed for public consumption This publication received widespread distribution

Although over-all reactions were favorable, some criticism came from Blue Shield representatives, with respect to the text of the one specific page The Committee and Council considered this criticism and redrafted the title and text of this page to satisfy the adverse comments It is now being republished and requests to date would seem to indicate a potential distribution of over a million copies, most of which will be made at cost price

Committee Publications—To provide valid sources of information both to the medical profession and the general public, the Committee has sponsored a series of pamphlets on insurance and related matters During the year four pamphlets in this series were completed They were A Buyer's Guide to Voluntary Health Insurance", "Hospital, Surgical, and Medical Expense Benefits", "Suggested Guides for Medical Society-Sponsored Voluntary Prepayment Medical Benefit Plans" and Disability Insurance' The brochure entitled "Voluntary Prepayment Medical Benefit Plans" usually published annually was not revised this year and will be published biannually in the future However, the supplemental "Charts and Graphs' was published in modified format

Contemplated in the near future are other pamphlets dealing with such topics as professional liability insurance, life insurance, and other forms of insurance the physician may need or desire in connection with his professional practice

Projects and Activities in Progress

Survey of Medical Society Committees—To follow up on the conferences with the Health Insurance Council the Committee is contemplating a survey to determine the existence of and scope of activities of health insurance information or liaison committees of state associations and county societies A number of such committees are known to exist but some are limited both in their scope of activities and interests *It is recommended that all constituent and component medical societies consider developing such committees, that they be given increased responsibilities for exchange of information and liaison, and that they be available equally to all legally constituted prepayment and/or insurance plans which do business in their respective areas*

Survey of Physicians Attitudes—In 1954, the Council initiated a Survey of Physicians Attitudes Toward Voluntary Health Insurance with results published in 1956 *It is recommended that this survey be up-dated and the new data made available to the medical profession as well as prepayment plan and insurance company executives to assist them in improving the administration of health insurance and related activities*

Regional Conferences and National Congress—The Committee has initiated plans for two more regional conferences in the New England and Mid-Atlantic areas to provide an opportunity for physicians, insuring organizations, prepayment plans, and others to follow up locally on the National Congress

In June at the Annual Session, the Council's Report, adopted by the House of Delegates, contained a *recommendation for a Second National Congress on Prepaid Health Insurance* Having assumed leadership with the First National Congress it is the Committee's belief that the American Medical Association can continue to maintain its leadership by further sponsorship of such activities

These two regional conferences, then, will be designed to further the preparation for a Second Congress in 1961

Voluntary Health Insurance

Enrollment and Benefit Payments—Enrollment growth under practically all forms of voluntary health protection continued during 1959 The greatest numerical growth was for regular medical expenses, second was surgical expense, third was hospitalization, and fourth was major hospital and medical expense coverage

Comparative total enrollment under all forms of insurance as of Dec 31, 1959, and the corresponding total for the preceding year for the four principal categories of benefits are as follows

	Dec 31, 1958	Dec 31, 1959	Growth
Hospitalization	123 038,000	127,896,000	4,858,000
Surgical Expense	111,435,000	116,944 000	5 509 000
Medical Expense	75 395,000	82,615 000	7 220,000
Major Hospital and Medical Expense	17,375,000	21,850,000	4 475,000

Blue Shield enrollment showed an increase of 2,217,667 from 42,575,256 to 44,793,923 All plans approved by medical societies plus those coordinated with or extensions of local hospital benefit plans reached a total of 48,631,967, an increase of 2,412,359 The net gain in enrollment for insurance company programs was 3,138,000 for surgical expense benefits The net growth in enrollment under the various categories of independent plans was 241,000

TABLE I —Distribution of Hospital, Surgical, and Regular Medical Expense Coverage by Type of Insuring Organization, Dec 31, 1959

Type of Insuring Organization	Number of Persons Protected (000 Omitted)		
	Hospital Expense	Surgical Expense	Regular Medical Expense
Insurance Companies			
Group Insurance	51,255	51,756	32,469
Individual Policy Insurance	31,718	27,456	8 582
Unadjusted Total	82,973	79,212	41,051
Deduction for Duplication* in no of Persons with Insurance Company Protection	7 516	6 919	2 824
Net Total for Insurance Companies	75,457	72,263	38 227
Blue Shield,† Blue Cross and Medical Society Plans	56 825	48 813	42 999
Independent Plans			
Industrial Plans	3,072	3,080	3,024
Community Plans	493	1 311	1 294
Consumer Sponsored Plans	165	239	196
Private Group Clinics	731	883	933
College Health Plans	400	300	900
Total for Independent Plans	4,861	5,813	6 347
Deduction for Duplication Persons Protected by More Than One Type of Insuring Organization‡	9 247	9 975	4,958
Net Total, Persons Protected	127 896	116,944	82,615

* Number indicates those who may carry insurance with more than one company

† Includes some plans which may not be medical society approved hence the variance between the HIC figure and the A M A figure as shown previously

‡ Estimated number of persons who carry both insurance company and Blue Shield Blue Cross or similar contracts

Table I, taken from the 14th Annual Survey of the Health Insurance Council, is a composite listing of persons protected by category of benefit and by type of insuring organization It is designed to reduce duplication arising from individuals carrying more than one contract or who are protected by more than one type of plan It is highly probable that there will be less duplication in coverage since a number of employers have taken the position that health insurance arranged for their employees (and dependents) shall not duplicate benefits available under other group programs

Table II, page 1082, reflects the percentage increases in enrollment growth by category of benefit and type of insuring organization over the past five year period

Although the data in Table I and II are impressive in revealing the extent to which people have availed themselves of various types of protection, such enrollment data are somewhat out-stripped by the vast increase in the amounts of benefits paid

TABLE III —Voluntary Health Insurance Benefits Paid, 1959 (000 Omitted)

Type of Benefit	Type of Insuring Organization			
	Insurance Companies	Blue Cross-Blue Shield and Medical Society Plans	Independent	Total
Hospital Expense*	$1,319 000	$1 458 000	$127,000	$2,904 000
Surgical and Medical Expense*	683 000	604 000	146 000	1,433,000
Total	$2 001,000	$2,062 000	$273 000	$4,337 000

* Includes Major Hospital and Medical Expense Benefits

Table III was developed to show the total amounts paid by category of benefit and type of insuring organization during calendar year 1959 Total benefits paid under health insurance (exclusive of loss of income) programs for the year 1959 represented a 11 7% increase over the preceding calendar year and the figures reflect expenditures at the rate of nearly $12 million a day for benefits paid to or on behalf of insured persons or for covered beneficiaries

If the loss of time benefits are added to Table III, the total expenditures for disability benefits and hospital, surgical, and medical expenses would increase to $14 million a day This is an increase over 1958 of more than a million dollars per day in benefit payments

Increasing Effectiveness

According to a report of the Health Insurance Institute, benefits paid to persons covered by hospital expense insurance are increasing at a much faster pace than the number of persons with such insurance This demonstrates rather clearly that health insurance, in addition to covering more people, is serving to assist in financing an ever-increasing proportion of the health care expenses of

insured persons A special release of the Institute emphasizes that

—During calendar year 1959 the number of persons with hospitalization insurance increased by 3 9% but benefit payments increased 12 2% Comprehensive data regarding benefits by category of expense have only been maintained since 1952 In that seven-year period (1952-1959) hospitalization insurance enrollment increased 40 6% while hospital benefit payments increased 170 9%

In other words, during 1959, the percentage increase in hospital expense benefits more than tripled the growth in enrollment and for the seven-year period the percentage increase in hospital benefit payments more than quadrupled the rate of enrollment growth

Some of the foregoing is reflected in Table IV which was prepared to indicate increases in benefit payments (both in dollar amounts and percentages) that have occurred during the same five-year period as used in Table II and is graphic evidence of the increasing effectiveness of the health insurance protection applicable to nearly 128 million people in America

The implementation of Public Law 86-382 (Federal Employees Health Benefits Act of 1959) will add substantially to the number of insured persons since some 1,800,000 employees and 2,200,000 dependents are eligible to participate However, although this program with a potential of 4 million persons undoubtedly constitutes the largest single group' covered by any one program, it does not necessarily mean this great an increase in the number of persons covered This is due to the substantial number of these persons who were already protected by programs and plans The net result may well be some realignments and transfers among the several plans which are eligible to qualify under the program In a number of instances there may be some "up-grading" of benefits

Coverage for the Aged—Constituent associations and component societies, along with Blue Shield, Blue Cross and private insurance companies, have continued to progress satisfactorily in their attempts to make voluntary health insurance available to all persons over age 65 who want and need such protection

In the 18 months since the adoption of Supplementary Report H by the House at the Minneapolis Clinical Session the number of Blue Shield plans offering benefits for enrollment of persons after attaining age 65 have increased five-fold and at the conclusion of the period covered by this report totaled 40 plans in 37 states With only a few ex-

TABLE II —Percentage Increases in Health Insurance Enrollment (1954 1959) by Category of Benefit and by Type of Insuring Organization

	Number of Persons Protected (000 Omitted)								
	Hospital Expense			Surgical Expense			Regular Med Expense		
Type of Insuring Organization	1954	1959	% Inc	1954	1959	% Inc	1954	1959	% Inc
Insurance Companies									
Group Insurance	35 000	51 255		35 723	51 756		15 778	32 469	
Individual Policy Insurance	25 338	31 718		21 442	27 456		6 513	8 582	
Unadjusted Total	60 438	82 973		57 165	79 212		22 291	41 051	
Deduction for Duplication* in number persons with insurance company protection	5 146	7 516		4 359	6 949		1 570	2 824	
Net Total for Insurance Companies	55 282	75 457	36 5	52 806	72 263	36 8	20 721	38 227	84 5
Blue Shield† Blue Cross and Medical Society Plans	47 484	66 825	19 7	34 809	48 843	40 0	24 668	42 999	74 3
Independent Plan	5 196	4 861	—6 4	4 801	5 813	21 1	4 908	6 347	29 3
Grand Total	107 962	137 143		92 506	126 919		50 297	87 573	
Deduction for Duplication Persons Protected by more than one type of insuring organization‡	6 469	9 247		6 616	9 975		3 049	4 958	
Net Total Persons Protected	101 493	127 896	26 0	85 890	116 944	36 2	47 248	82 615	74 8

* Number indicate those who may carry insurance with more than one company
† Includes some plans which may not be medical society approved hence the variance between the HIC figure and the A M A figure as shown previously
‡ Estimated number of persons who carry both insurance company and Blue Shield Blue Cross or similar contracts

TABLE IV —Increases (dollar amounts and percentage) in health insurance payments during 1959 over 1954 (000 Omitted)

		Category of Benefit		
Type of Insuring Organization	Year	Hospital Expense	Surgical Medical Expense	Total
Blue Shield Blue Cross and Medical Society Plans	1959	$1 458 000	$604 000	$2 062 000
	1954	745 000	300 000	1 045 000
5 yr $ Increase		$ 713 000	$304 000	$1 017 000
5 yr % Increase		95 7%	101 3%	97 3%
Insurance Companies	1959	$1 319 000	$683 000	$2 002 000
	1954	615 000	375 000	990 000
5 yr $ Increase		$ 704 000	$308 000	$1 012 000
5 yr % Increase		114 5%	82 1%	102 2%
Independent Plans	1959	$ 127 000	$146 000	$ 273 000
	1954	85 000	60 000	145 000
5 yr $ Increase		$ 42 000	$ 86 000	$ 128 000
5 yr % Increase		49 4%	143.3%	88 3%
Grand Totals—All Types	1959	$2 904 000	$1 433 000	$4 337 000
	1954	1 445 000	735 000	2 180 000
5 yr $ Increase		$1 459 000	$698 000	$2 157 000
5 yr % Increase		100 97%	94 97%	98 9%

ceptions, hospitalization expense protection is available in the companion Blue Cross plan The interim Progress Report in June, 1960, noted that these plans together with additional ones under development covered areas which currently account for 95% of all Blue Shield membership

Pursuant to Supplementary Report D of the Council on Medical Service at the 1959 Clinical Session in Dallas, a 43-page special compilation was made available to all members of the House Among other things, that special compilation recited the seven methods utilized by insurance companies to provide coverage for persons over age 65 It also included a listing of several companies as examples of the availability of protection as well as a summary of some special activities of insurance company and other programs Those activities are continuing and in the interest of brevity, the details are not restated here In addition, it is encouraging to report that an increasing number of employers are facilitating the continuation of health insurance protection for their employees into retirement

The Committee continues to maintain regularly revised data on developments in this field for dissemination to medical societies, plans, and other interested parties on request

As in the past, similar detailed information containing the latest available data will be submitted in a Supplementary Report to the House at the Clinical Session

Blue Shield-Blue Cross

Change of Name National Association of Blue Shield Plans officially became the name of the national organization with its adoption at the 1960 Annual Conference of Plans The new name had long been used to identify and describe more completely the function of the former "Blue Shield Medical Care Plans"

Blue Shield Study Commission A Commission has been established by the National Association to undertake a major study of the differences of concept and coverage among the 74-member Blue Shield Plans which have resulted in different approaches to the problem of providing adequate protection to the public

Blue Shield has interpreted the area of study and recommendation of the already created Commission as logically related to the House action in June affirming American Medical Association support of the Blue Shield concept and providing for strengthened relationships between the A M A and Blue Shield Plans

A M A representatives on the Board of Directors of the National Association of Blue Shield Plans—Drs David B Allman, Atlantic City, N J, George M Fister, Ogden, Utah, and Dwight H Murray of Napa, Calif,—are all members of the nine-member Commission

Blue Cross Reorganization A complete re-organization of the national Blue Cross structure designed to provide a more effective national vehicle has been proposed by action of the 79 member plans Implementation of the new organization awaits only the approval of the American Hospital Association House of Delegates in August In effect, the proposal would abolish the Blue Cross Commission and combine its present functions with the Blue Cross Association, formed a few years ago to conduct the external operations of the plans at the national level

If the approval is granted, a new Council will be created within the A H A to conduct those functions relating to protection of the Blue Cross service mark the licensure agreement, the approval program for individual plan's participation, and areas of relationship between hospitals and Blue Cross plans

All other functions will be the responsibility of the new national body These include national enrollment, advertising and public relations, research, government relations, the various inter-plan reciprocal activities, national benefit certificates and relationships with the National Association of Insurance Commissioners

The pattern of reorganization approved by the Blue Cross plans in April provides for A H A representation on the Blue Cross governing board through A H A election of 3 members to a 25 or 27 man board Blue Cross in turn would elect 2 of the 15-member Board of Trustees of the American Hospital Association

COMMITTEE ON MEDICAL FACILITIES

Members of this Committee are Drs Willard A Wright, Chairman, Williston, N D, William F Costello, Dover, N J Robert L Novy, Detroit Mich, David Henry Poer, Atlanta, Ga, W C Stover, Boonville, Ind, Walter E Vest, Huntington, W Va, John M Rumsey, San Diego, Calif, and Dr Charles L Hudson, Cleveland, Ohio, who was appointed during the year Dr Edward C Rosenow Jr, of Philadelphia serves as consultant Staff members are Mr George W Cooley, Committee Secretary and Mr Henry Mason

Projects and Activities Completed

Committee Meetings The Committee has met on four occasions September 19-20, 1959, in New York City, January 9-10, 1960, in Washington, D C, February 5-6, 1960, in Chicago, and April 9-10, 1960, in Chicago

Physicians' Offices In or Adjacent to Hospitals At the 1958 Annual Session the following resolution, (No 32) introduced by the Illinois delegation, was adopted by the House of Delegates

Whereas, Many members of the medical profession are seriously concerned over the growing tendency on the part of hospitals to expand existing facilities to include more and more outpatient services, and

Whereas, This expansion has resulted in the establishment of office space for staff physicians in the hospital and in some instances the setting up of separate office buildings to be used for outpatients, and

Whereas, The arrangements between hospitals and physicians in these outpatient programs are such as to encourage the practice of medicine by hospitals through control of services rendered such as (compulsory) utilization of hospital departments—EKGs, Lab, Path, X-ray, etc—to the detriment of the free choice presently available, therefore be it

Resolved That this matter be directed to the attention of the American Medical Association with a request that a study be made to determine whether or not the growing practice by hospitals of encouraging staff members to conduct their private office practice within or adjacent to the hospital is a major move toward the practice of medicine by hospitals

The Board of Trustees referred this resolution to the Council on Medical Service for study and report to the House of Delegates The Committee on Medical Facilities of the Council was requested to review the situation and undertook (1) a review of current literature on the subject and (2) a survey of selected areas where physicians had offices in or adjacent to hospitals

Review of Literature Principal studies made on this subject are (1) *Physicians Private offices at Hospitals,* by C Rufus Rorem, (2) *New Trend Toward Location of Physicians' Offices Near Hospitals,* by N O Gunderson, M D, and (3) *Doctors Offices in Hospital Financed Buildings,* by the Foundation for Management Research These studies considered the development of physicians offices in or adjacent to hospitals from three different aspects Implications for hospital administration, for the community as a whole, and for the economic health of the community The first two reports were favorable to the development, the third was unfavorable A brief review of some of the findings of these studies would seem to be of interest to the Delegates

The following observations were taken from a study entitled *Physicians' Private Offices at Hospitals,* by C Rufus Rorem

(1) A hospital office results in mutual advantage to a doctor and hospital The physician effectively uses his professional knowledge and skill, the hospital renders greater service through close identification with its medical staff and greater utilization of its facilities

(2) Tenant-doctors gain a greater understanding of hospital problems, including the non-professional aspects such as dietary, however, that proximity to the administrative offices has resulted in unreasonable demands for changes in procedures

(3) Hospital offices for doctors have prompted active interest in group medical practice They provide savings in professional expenses, and convenience in conference and referral But they have not been a primary factor in prompting physicians to pool their earnings from the care of private patients

(4) The development of doctors offices at hospitals is not regarded by doctors or hospitals as a type of social reform The motivation has been professional, economic and administrative

(5) Doctors offices at hospitals are a logical development of specialization in medical practice and the reliance upon large capital investment The doctors provide the professional knowledge and skill The community provides the funds for building and diagnostic and treatment facilities

(6) Hospital offices have not led to improper institutional control over private medical practice Professional policies and procedures remain the responsibility of the medical staffs of the institutions

(7) Hospital ownership of private office facilities has, in general, been more widely developed than the construction of commercially-owned buildings adjacent to non-profit hospitals Experience indicates that adequate capital funds can be obtained when a non-profit hospital wishes to provide physicians private offices

(8) Physicians private offices will be established at more nonprofit community hospitals in the future Attempts will be made to accommodate all staff members who wish office space, thus avoiding the criticisms that tenant-doctors enjoy special privileges

In the study entitled *New Trend Toward Location of Physicians Offices Near Hospitals,* N O Gunderson, M D, Commissioner of Health in Rockford, Illinois concluded that

There has been presented certain pertinent data on a trend that seems to indicate that more and more physicians offices are being located in or near hospitals in this country

To date, the trend toward physicians offices at hospitals is occurring within the general framework of individual competitive medical practice

The third major study done by the Foundation for Management Research concentrated on the financial implications of the question and concluded that the leasing of offices to physicians was a painless way for hospitals to increase their cash income

Review of these reports showed that the above studies had not taken into account the attitude of physicians practicing in areas where this trend was most prevalent It was therefore decided that an opinion survey of physicians toward the development was indicated Nine major areas with a concentration of such facilities were selected for survey They were

Memphis, Tenn
Houston, Tex
Philadelphia, Pa
Los Angeles, Calif
Atlanta, Ga
Chicago, Ill
Rockford, Ill
Grand Rapids, Mich
Hartford, Conn

A brief questionnaire was prepared, and the assistance of the executives in the nine local medical societies was obtained They were asked to distribute the questionnaires equally among physicians having offices in or adjacent to a hospital and physicians whose offices were not connected with a hospital Completed questionnaires were received from six of the nine areas

Comments from physicians may be summarized as follows

Unfavorable Comments

1 This development interferes with the free practice of medicine, producing factions and cliques within the profession

2 It is discriminatory in favor of physicians with in-hospital offices giving them an advantage in use of hospital facilities This would result in the growth in number of closed staff hospitals and limit physicians to staff privileges in one hospital
3 It tends to encourage the overuse of hospital services such as x-ray and laboratory, thereby increasing the cost of illness
4 It may lead to some hospitals entering into the practice of medicine
5 It places tax-exempt institutions such as hospitals in direct competition with private real estate interests

On the other hand, comments that were favorable may be summarized as follows

Favorable Comments

1 Enables physician to provide better medical service because of ready access to a variety of diagnostic tools and consultants
2 Enables physicians to have more rather than less influence on hospital policies
3 More convenient for the patient, enabling patients otherwise admitted to the hospital to be treated on an outpatient basis
4 Permits more efficient use of the physician's time
5 Makes it easier for physicians to attend hospital staff meeting

Summary of Findings

1 A majority of physicians replying had no objections to the location of offices in or adjacent to hospitals
2 Most physicians replying believed that the location of their offices had no effect on their relationship with other physicians or the hospitals in the community
3 The advantages of this arrangement seemed to outweigh the disadvantages
4 At this time the location of physicians'offices near or adjacent to hospitals is beneficial to patients, physicians and hospitals
5 The minority of physicians who did object had valid and sound reasons for being concerned over this trend

Recommendation

The Council on Medical Service concurs in the conclusions reached by the Committee on Medical Facilities that, in the light of data presently available, the trend toward locating physicians' offices in or adjacent to hospitals does not at present constitute a major move toward the practice of medicine by hospitals The survey has shown, however, that there are objections to this trend on the part of a sufficient number of physicians to make it apparent that continuing study and periodic re-evaluation are necessary

Nursing Home Study.—To meet some of the needs for definite information about the current operations of nursing homes, the Council on Medical Service of the American Medical Association and the American Nursing Home Association jointly conducted a questionnaire survey of the 4,500 member homes of the latter organization during 1958-59 About 1,350 homes returned questionnaires To supplement the data obtained in the questionnaires study, staff members of the Council on Medical Service visited 66 of the better skilled nursing homes in 22 states Information was obtained on the extent and supervision of medical care, type and function of nursing staff, the availability of ancillary services, charges for care and characteristics of patients

According to the survey increasing recognition is now given to the need for more medical supervision and planning by part or full-time staff physicians, good patient records, additional training of nursing personnel and rehabilitation and vocational activities The survey points up the need for the following

(1) *Universally recognized standards of care to provide a sound basis for evaluating services and facilities* Such standards are contained in a set of "Guides for Medical Care in Nursing Homes and Related Facilities," prepared jointly by the American Medical Association, American Nursing Home Association, and American Hospital Association The immediate task is for physicians and others interested in improving the standards of nursing home care to initiate or participate in urging compliance with these standards

(2) *More effective coordination of nursing home services with other groups, including hospitals and public health agencies* To accomplish this requires that nursing homes be located either in close proximity to or have an arrangement with a general hospital to assure patient's access to diagnostic services and immediate transfer for intensive medical treatment It also necessitates that arrangements be made for a staff physician or medical advisor who will be available to evaluate care required and see that arrangements are made when such care is needed

(3) *The development of social, recreational, and restorative services to permit patients to remain as active as possible* and prevent deterioration due to patients remaining bedfast This, of course, requires nursing home personnel to be trained to have a direct relationship with and knowledge of the characteristics of older persons and how best to work with them It also implies greater interest on the part of both nursing home personnel and physicians in rehabilitation and restorative services

(4) *More realistic payments by public assistance agencies for the kind of care needed by their clients*

The low level of public assistance payments is the strongest single deterrent to improvement of care and facilities in nursing homes Since more than 50% of the patients in nursing homes are maintained in whole or in part by public assistance, a substantial proportion of homes gear their operations to the level of assistance payments, however, a flat increase in public assistance payments on a state-wide basis would not provide any motive for raising standards of care Improvements in care could be achieved if assistance payments were geared to the needs of the patient and the ability of the home to provide service Welfare agencies should not expect to pay wholesale rates for nursing home care These agencies should be prepared to pay full charges for the kind of care their cases need

The report, Summary of a Survey of Nursing Homes, 1958-1959," appears in the July, 1960, issue of *Nursing Homes*, the official publication of the American Nursing Home Association, and reprints are available to members of the House

Report on Physician-Hospital Relations

At the 1959 Clinical Session of the Association, 12 resolutions concerning physician-hospital relations were introduced These resolutions in the main called for a reaffirmation of the *Guides for the Conduct of Physicians in Relationships with Institutions* adopted by the House of Delegates in December, 1951, and since reaffirmed on several occasions

As requested, the Council and its Committee on Medical Facilities reviewed the entire subject and made a complete report to the House at the 1960 annual Session (Supplementary Report B) A reprint of the 1951 guides has been prepared in accord with the action of the House

Study of Relationships of Physicians Not-in-Private Practice to Organized Medicine

In response to a request from the Board of Trustees the Council on Medical Service undertook a study of the relationships of physicians not-in-private practice of medicine to those in the private practice in the interest of strengthening the American Medical Association as an organization for all doctors of medicine

The Committee on Medical Facilities was assigned the project and employed the following methods in order to define the issues and to provide a body of findings and conclusions

1 Conferences on intraprofessional relationships were held with representatives of the American Public Health Association, the Association of State and Territorial Health Officers, National Health Council, Veterans Administration, U S Public Health Service, and the Armed Forces The Committee also met with the representatives of the Medical Society of the State of New York, the Metropolitan Medical Council, Washington, D C, as well as with representatives of the insurance industry, and physicians in industrial medicine and medical administration Other meetings were held with physicians employed by closed panel plans, hospitals, and medical schools
2 Staff members conducted research, made studies and prepared reports, including a special IBM tabulation that classified all active dues-paying members of the American Medical Association by type of practice

The findings, conclusions, and recommendations were approved by the Council on Medical Service in April, 1960, and reported to the Board of Trustees at its meeting in June, 1960

Projects and Activites in Progress

Study of Public Health Department Functions and Activities—At the request of the Board of Trustees, the Council on Medical Service is now studying and analyzing the growth and present status of public health department services and the relationship of these services to private practice and to this Association's present policy The concept of public health set forth by the House of Delegates in a 1950 policy statement consists of the following six services

1 Vital statistics
2 Public Health education
3 Environmental sanitation
4 Public health laboratories
5 Prevention and control of communicable diseases
6 Hygiene of maternity, infancy and childhood, if private facilities are unavailable

It has been suggested by many concerned with the relationship between physicians in private practice and those in public health that the concept of public health as defined by the traditional basic six services has been somewhat outdated If this is so, one of the main results of this study will be to provide a basis for bringing this definition up-to-date for American medicine To assist the study committee in its deliberations a group of consultants, made up of representatives of key public health associations, was appointed to assist and advise the Committee assigned to the project

The Committee has completed the first phase of a study of the character and content of state health department programs and is presently in the process of applying a similar study method to local health departments The services provided by each department were grouped according to a basic classification and the latest annual reports and expenditures of each health department were reviewed The main objective of these studies was to demonstrate what public health departments were doing and also provide the study committee with a common baseline or point of departure from which a realistic concept of public health could be developed and compared with present policy

That the relative amounts of state and federal expenditures of state health departments for annual operating purposes are impressive is evident in the following expenditure figures

	Amount*	Per cent
Total Expenditures of State Health Departments	$358,627,535	100 0%
State Funds	306 386 006	85 4
Federal Funds	52,241,529	14 6

* Excludes Mississippi and Nevada for which state and federal expenditures were not reported separately

While a small number of state health departments expend more than half of their funds for services which do not fit the traditional public health definition, an equal number of states limit themselves almost entirely to these traditional services However, because of the growing tendency of states to adopt medical care programs for the chronically ill and indigent families, it is more than likely that the trend will be toward a growing number of medical care programs by state health departments

Almost 90% of non-basic programs are made up of three categories of expenditures chronic disease, crippled children, and hospital and medical services for indigent families The first of these programs receives extensive subsidies from the Public Health Service and the Children's Bureau, whereas the third is a state-supported program

The Committee, with the help of the public health consultants, expects to consider all of these factors and trends in arriving at an acceptable up-to-date concept of public health in order that the AMA many continue to exercise leadership in this important area

Study of the Central Hospital Bureaus —The "hospital bureau" is a method used by about 20 communities in the country to provide supplementary operating funds to local non-profit and non-governmental hospitals These funds are raised in the annual "Community Chest" or United Fund drives in these communities The "hospital bureau method" refers to the payment by an agency for hospital care on an individual case basis when the patient cannot pay his own care The "hospital bureau method" generally requires the use of investigators to establish whether or not the patient can meet the cost of his care Some bureaus consider the payments made on behalf of patients as a loan, and thereby make various attempts to recover payments from patients and their families

At the same time, in many additional communities the community funds make such grants to hospitals on a deficit financing basis or according to a formula related to such factors as numbers of ward beds, and numbers of outpatient visits While the study seeks to determine the value of the hospital bureau method and to explore its potential, these other techniques are also being reviewed

Four kinds of surveys are being made as background for this study three through the process of written questionnaires and one through the cooperation of the United Community Funds and Councils of America and its IBM accounting system These are

1 A questionnaire aimed at obtaining information regarding the administrative policies and community service of the existing hospital bureaus
2 A questionnaire directed to united fund directors to elicit their opinions regarding the relationship of their funds with local general hospitals
3 A questionnaire directed to selected hospitals throughout the country to elicit their opinion regarding this relationship with their community fund
4 Information to be obtained from the United Community Funds and Councils of America showing the trends in financing of general hospitals by United Funds

The responses to these questionnaires are being tabulated and are disclosing new information concerning the policies and the relationship of United Funds with respect to the problem of paying for hospital care The operating policies of United Funds in this area will provide background material for consideration of the over-all pattern of the use of voluntary agency funds for health and medical care services

Tripartite Liaison Committee —This committee, consisting of representatives of the American Hospital Association (AHA) and the American Nursing Home Association (ANHA), and the American Medical Association, is an instrument of action whereby the committee is able to further its interest and activity in the nursing home field The three organizations represented have a common interest in raising the standards of care given in nursing homes It is the purpose of the committee to identify and define important problems concerning institutional care of the chronically ill and aged and to present these problems to their respective organizations

Representatives of the American Medical Association on this Tripartite Liaison Committee are Willard A Wright, M D, Williston, N D, John Flack Burton, M D, Oklahoma City, Okla, and Frederick C Swartz, M D, East Lansing, Mich

The committee met in Chicago on two occasions during the year to complete its organizational structure, to arrange for contact with other national organizations such as the Joint Council to Improve the Health Care of the Aged, and to consider the question of accreditation of nursing homes and the development of standards for an accreditation program The problem of accreditation led the committee into two avenues of activity One is the development of a study-project to test a set of nursing home standards as a basis for a national accreditation program The committee staff is presently developing a prospectus for such a study and expects to present a draft proposal at the September meeting of the committee The second avenue is how to make best use of the American Hospital

Association's "Listing Program for In-Patient Institutions Other Than Hospitals" While this program was established in November, 1958, the expense and the unavailability of survey personnel have made it difficult to proceed rapidly enough to make the program worthwhile In general the standards for listing a nursing home follow closely the 'Guides for Medical Care in Nursing Homes and Related Facilities" approved by the three organizations

Workshop on Hospital-Nursing Home Relationships —In many parts of the country, hospital personnel have little information about nursing homes in the community or how to work with them in the interests of providing for long-term patients the kind of care best suited to their needs To help alleviate this situation it was believed that a conference at the national level to discuss hospital-nursing home relationships could set a pattern for and stimulate the holding of similar conferences in the states and communities

In May, 1959, the Board of Trustees of the American Hospital Association voted to invite the American Medical Association, Public Health Service, American Nursing Home Association, and the Blue Cross Commission to co-sponsor with the American Hospital Association a workshop to explore means of developing effective hospital-nursing home relationships All readily accepted the invitation A joint planning committee of staff from the organizations was appointed to develop the program and carry out the necessary details

In February, 1960, the workshop was held at the American Hospital Association headquarters in Chicago Its objective was to focus attention on improved hospital-nursing home relationships in local communities to (a) improve the quality of care to the long-term patient, (b) assure continuity of care, and (c) encourage optimum use of facilities and services Dr Willard A Wright was the conference summarizer and members of various Council Committees participated One of the critical items brought out in the summary report was the important role of the physician and his responsibility for providing leadership in establishing appropriate programs for community planning that will give maximum assurance of care in accordance with the needs of each patient

Workshop on Home Care Services —Effective home care programs can do much to prevent unnecessary institutionalization of persons Despite excellent demonstrations of such programs over the last several years, they have not had a significant growth

In May, 1959, the Board of Trustees of the American Hospital Association invited the American Medical Association, the Public Health Service, the Blue Cross Commission, and the Blue Shield Medical Care Plans to co-sponsor with the American Hospital Association a workshop on home care programs All organizations accepted the invitation A joint planning committee composed of staff of the five organizations was formed to work out the program and other necessary details The workshop was held in April, 1960, at American Hospital Association headquarters in Chicago

Its objective was to develop methods for stimulating the growth and expansion of organized home care Questions for consideration were (1) What are the obstacles to the development and growth of organized home care? (2) How can these obstacles be overcome and by whom? (3) How can organized home care be effectively promoted by community, state, and national organizations?

Dr Dean W Roberts, a member of the Council's Committee on Indigent Care was the workshop summarizer and other Committee members participated The American Medical Association, through its leadership and through its appropriate committees, has accepted and endorsed the validity and usefulness of organized home care programs Physicians appear to support such programs for patients who are receiving care at public expense but resist the program when it is available to non-indigent patients This may be due to a concern over the effect of such programs on the physician-patient relationship However, communities have demonstrated that home care programs can be helpful for the private patient and in a manner that has the support of the private physicians in the community

The Council, therefore, recommends that physicians be urged to participate in organized home care programs for any patient who can profit from the program, and to promote such programs in their communities

National Inventory of Home Care Programs —In 1956 the Committee on Indigent Care prepared the first comprehensive report on organized home care programs Since that time, the American Hospital Association, Blue Cross Commission, the Blue Shield Medical Care Plans, and the U S Public Health Service have all expressed interest and some have undertaken conferences on home care programs To coordinate their activities all five organizations agreed to sponsor a nationwide inventory

The inventory is being conducted by mail questionnaires and contains three parts (1) the historical background of the program, (2) current programs, and (3) an annual activity report Questionnaires have been sent to 437 hospitals, public health departments, and other community agencies reported as maintaining such a program Returns from 335 have been received A joint report will be made early in 1961

Physicians Placement Service —The Committee has continued to review the activities of this service and to revise its policies where such action might result in improvement It continues to be primarily a complement to the state society and specialty group placement services with primary emphasis

on the needs of smaller communities However, as more physicians have learned of this service, new functions have had to be added or old ones expanded

Some of the policy matters under consideration by the Committee concern (a) the activities of the Placement Service in the industrial field, (b) services to physicians seeking overseas assignments, (c) services to hospital and other public medical institutions seeking physicians, and (d) requests which involve the sale or rental of physicians' offices

During the coming year the Committee hopes to meet with the directors of state programs and specialty boards to define relative responsibilities in placement so that doctors, communities, and others in need of this service can obtain the best help Such a meeting or meetings should assist staff to prepare a new pamphlet which will spell out in detail the kinds of services each group is prepared to offer An exhibit along similar lines is also contemplated

Guidelines for Community Hospital Planning—The Council is represented on a new committee established by the Public Health Service and the American Hospital Association to develop guidelines for community hospital planning especially in metropolitan areas Dr Willard Wright is the American Medical Association representative on this committee which has already had two meetings The group expects to develop and publish guidelines for local communities in planning their hospital facilities and for obtaining compliance by local interests with that plan

Liaison Activities with the Council on Medical Education and Hospitals—Members of the Committee on Medical Facilities have represented the Council on this liaison committee in the preparation of a report on "the provision of medical service for paying patients by salaried clinical faculties of medical schools" They have also participated in a study of "the hospital resident and the paying patient" Under the latter proposal, the Committee is examining the feasibility of providing medical service to paying patients by resident physicians whereby the fee collected shall be deposited in a central fund administered by a committee of the attending staff

Hill-Burton Hospital Construction Program—This Committee continues to follow the Federal grant program for hospital construction and to report annually The recommendations approved by the House in 1958 have had considerable influence on construction trends In fact, current amendments primarily provide for additional funds to renovate large hospitals in metropolitan areas Other changes to improve the program are being submitted through the Federal Hospital Council As of June, 1960, the Hill-Burton program expended $1,385,000,000 for 5,199 projects which were constructed at a total cost of $4,468,000,000

Medical Loans Granted by the Small Business Administration—Since this agency was established in 1953, there has been a steady growth in the number of loans granted for medical and other health services The greatest number are being given for the construction and equipping of physicians' and dentists' offices, hospitals, and convalescent rest homes Medical loans granted by this agency in 1959 totaled $5,903,025 compared to $4,189,000 for the first six months of 1960 alone In this connection a bill in the 86th Congress calls for additional loan guarantees for the construction of group practice units, which bill had considerable support

Experience of the Canadian Federal-Provincial Hospital Insurance Plan—It has been brought to the attention of the Council that this program may have impact on medical practice in the United States In view of this and to have data available on the Canadian program, the Council requested the Committee to undertake a study of the history and development of this program and to compile information on the experience and acceptance of the program

COMMITTEE ON FEDERAL MEDICAL SERVICES

The membership of the Committee had several changes during the year Dr Burns A Dobbins, Fort Lauderdale, Fla, was appointed to the Committee to replace Dr Vincent W Archer, Charlottesville, Va, who resigned Dr Milo A Youel, San Diego, Calif, was added to fill the vacancy created by Dr J Lafe Ludwig's election as Council chairman Dr Louis M Orr, Orlando, Fla, who as immediate Past President of the American Medical Association, is an *ex officio* member of the Council, was appointed to the Committee, Dr Orr was chairman of this Committee prior to his election to the Presidency of the Association

Dr David Henry Poer, Atlanta, Ga, a member of the Council on National Security, was designated by that Council as Liaison Member to the Committee, replacing Dr Richard L Meiling, Columbus, Ohio Dr Meiling, previously, and now Dr Poer have provided a mechanism whereby the Committee, which deals with Federal programs involving civilians, and the Council on National Security, which deals with Federal programs involving the Armed Forces, can maintain an interchange of information of subjects where the two overlap

Other members are Drs Russell B Roth, Chairman, Erie, Pa, Henry S Blake, Topeka, Kan, Donald C Conzett, Dubuque, Iowa, Robert S Green, Cincinnati, Ohio, and Oscar B Hunter, Washington, D C Mr C Joseph Stetler, Chicago, is a consultant to the Committee Staff members are Mr George W Cooley, Committee Secretary and Mr James H Fleming

Projects and Activities Completed

Committee Meetings—During the year from July 1, 1959, to June 30, 1960, the Committee held two formal meetings, in Washington, D C, one on July 15 16 and the other on October 11-12 During the October meeting, the Committee met with Brig Gen Floyd L Wergeland, USA (MC), Director of the Office for Dependents' Medical Care (Medicare) and with Dr Jack Masur, Director of the Clinical Center, National Institutes of Health, and inspected the Clinical Center in Bethesda

The Committee members also met informally at Dallas on November 30 with Dr Turner Camp of the Veterans' Administration to discuss the status of Hometown Care programs

In January, Dr Roth, Chairman of the Committee, met in Washington with American Legion representatives to discuss new developments in American Medical Association policies on veterans' care and resumption of liaison between the two groups

The Committee was also represented at the Council s Medical Services Conference, held during the Dallas Clinical Session Dr Roth moderated the section of the Conference devoted to the Medicare program, its current problems, and its future General Wergeland presented a progress report on the Medicare Program

Publications—The issues of the Federal Medical Services *Newsletter* produced during the year covered American Medical Association policy statements on various aspects of Federal medical programs adopted at the 1959 Clinical Session, the comparative study of Hometown Care programs mentioned above, an analysis of H R 7965, and a report on new federal research expenditures The present mailing list includes over a thousand names, consisting primarily of medical society committee members but also including a number of libraries and non-medical organizations

Projects and Activities In Progress

Veterans Hometown Care—For over two years this Committee, with the assistance of several state medical associations, has urged the Veterans Administration to restore or enlarge the intermediary programs of Hometown Medical Care for service-connected disabilities At the Committee s informal meeting in Dallas it was evident that Dr Camp, of the Veterans Administration, opposed these programs and favored VA administration of this program in those states where state societies or Blue Shield plans formerly acted as administrators and even preferred expansion of VA outpatient clinics to eliminate all free choice of physician for those with service-connected illnesses This is despite the Committee s belief, endorsed by the House of Delegates, that the intermediary system is the most effective from the point of view both of the medical profession and of the patient

This belief is strongly supported by a study (published in Federal Medical Services *Newsletter* 22) comparing intermediary, direct agreement, and "no agreement programs in 15 states The report concluded as follows

> The Committee feels the above data, while not conclusive proof, nevertheless strongly supports the American Medical Association position that the intermediary contract, as constituted prior to the current curtailment of function by the VA, is a more effective means of providing outpatient care for service connected disability than direct agreements or the no agreement method, since more of the veterans outpatient care is provided by private physicians, he has a greater degree of choice among the active private practitioners in his state a greater percentage of the private physicians actually provide treatment, and the physician receives more adequate reimbursement for his services and is thus more willing to continue participating in the program
>
> The Committee therefore reaffirms its belief that the intermediary functions should be restored in those states where they are now curtailed, and that other states should consider utilizing this method *to improve the care of the service-connected veteran*

Free Choice Veterans' Care—It is the policy of this House of Delegates (adopted November, 1959) that, since care of service-connected disabilities at federal expense is generally accepted to be a *right*, rather than a privilege *the veteran should* also *have the right to choose where* and *by whom he should be treated* and 'that veterans requiring office, home, hospital, nursing home or convalescent care for any service-connected disability should have the right to choose between (1) care by a private physician in a private facility at federal expense, or (2) treatment in Veterans' Administration facilities, rather than that this decision should be, as at present, the prerogative of Veterans' Administration officials'

This policy is in accord with the medical profession s objective of the best possible medical care for service-connected cases, injured or ill as a result of his service to his country In the long run it would also be an economy measure, since it would relieve pressure for the construction of additional VA facilities and for increased VA staffing Further, it would save the veteran himself time spent travelling to VA facilities and money lost by being treated away from family and employment With all the emphasis in Congress on civil rights, minority rights, and various other "rights it would seem that all legislators would support this right for veterans who have suffered injury in their country s service It would seem, too, that veterans organizations would rally to the support of such a stand Yet, in neither case is this true Therefore, the Committee is studying ways by which the recommendation can be implemented and legislative changes which might be suggested to the appropriate departments of the Association for further action

Non-Service-Connected Admission Policies—At the 1959 Clinical Session, the House recommended three basic improvements in admission policies

1 A realistic definition of "inability to defray necessary expenses"

2 A realistic estimate of the cost of civilian care

3 Priorities based on need

None of these improvements has been made nor, to the Committee's knowledge, was any legislation introduced during the past year to make VA admission policies more reasonable The veteran's own assessment of his ability to pay for care remains the deciding factor in determining eligibility except in what may be fairly considered "outrageous" cases of misrepresentation It appears to be a matter for the local VA officials to decide how much civilian care would cost, by whatever standards they wish to set There seems to be little attempt to give priority to those veterans facing a financially catastrophic illness, over those for whom private care would cause only a financial inconvenience

State Association Action—In making the above recommendations, the House also urged state associations to provide active assistance in obtaining needed care for veterans with financially catastrophic disabilities, to help veterans determine the probable cost of private care, to establish liaison with VA hospitals to help them estimate costs and facilitate admission of catastrophic cases, and to take steps locally to assist veterans and their organizations to obtain care for those who need it most

The Rhode Island Medical Society and its Committee on Veterans Affairs have done an outstanding job of follow-up on this action This Committee studied the situation at the Providence VA hospital, reported on the obvious capabilities of Rhode Island's non-federal hospitals for handling the entire non-service-connected load, and recommended implementation of the three improvements suggested by the American Medical Association This action received strong editorial support from the Providence *Evening Bulletin* and *Sunday Journal*, and recognition of the economy and improved care which would result from these suggestions This is concrete evidence that such an approach to the problem of non-service-connected care can achieve considerable popular support

The Council therefore recommends *that more state associations take steps to bring these suggestions for improvement to the attention of the general public, as applied to the veterans' care situation in their own states* It also requests state associations to inform the Committee of any actions they may take in this area

Medical Education and Research in VA Facilities—In the 1959 Annual Report, the Council reported the beginning of meetings of a liaison committee between the Council on Medical Service and the Council on Medical Education and Hospitals One of the subjects this committee is considering, in accordance with the December, 1958, charge of the House of Delegates, is the effect of VA residency training programs on teaching programs in non-federal hospitals

The liaison committee met in Chicago in November and at Miami Beach in June As a result of its discussions, a project draft has been drawn up outlining the data which the Committee on Federal Medical Services has suggested as basic for evaluating the VA's educational impact This draft is being submitted for appraisal, emendation, and implementation by the two Councils, and the results of the study will be reported to the House when completed

Medicare—As the House is aware, many of the restrictions placed on the Medicare program as an economy measure in October, 1958, were eliminated, as the 1959 Annual Report predicted, on Jan 1, 1960 The "permit" system remains, under a new name ("*Nonavailability Statement*"), as a means of maintaining a load of about 427,000 in service hospitals, but care was restored for treatment of injuries on an outpatient basis, pre- and post-hospitalization tests and procedures required for hospitalized cases, acute emotional disorders (on a limited basis), and *some* planned surgery, necessary but not acute or emergent

From projections of data it seems that the number of dependents per serviceman is increasing and that there will be a corresponding increase in demand for Medicare services Since there is no plan to increase the service facilities utilized for such care, there should be a continual increase in the use of civilian physicians and hospitals for such care

There appears to be little dissatisfaction with the program either on the part of the Office for Dependents' Medical Care or on the part of the medical profession, although physicians in some areas are still opposed to the requirement that dependents residing with sponsors may not be treated by civilian physicians under the program unless the service facility states that it cannot provide the necessary care However, there is no immediate likelihood that this requirement will be changed, since its purpose is to keep service hospitals operating at "optimum capacity"

Some questions have been raised concerning the lack of definition, in individual cases, of what care will be reimbursable Since such prior definition would require a much greater degree of control by service authorities of private practitioners, the Committee feels that the present system, under which the private physician must be familiar with the procedures reimbursable under the program is probably preferable

Too many physicians still fail to obtain adequate identification of dependents before beginning treatment, and about ten per cent of physicians' claims are submitted five months or more after care was provided, in both instances, administrative problems obviously result On the other hand, if the physician presents his claim before care is com-

pleted, it cannot be paid in full since government regulations prohibit payment for services not yet provided

The Council therefore recommends *that individual physicians*

1 *Maintain current information on services reimbursable under Medicare,*
2 *Obtain all necessary data before beginning care except in emergencies,*
3 *Submit claims promptly, but after reimbursable care is completed*

The Committee on Federal Medical Services maintains liaison with the Office for Dependents' Medical Care and meets with officials of the program as the occasion arises It suggests that any problems not solved at the state level or requiring further action or explication be brought to its attention for discussion with these officials

National Institutes of Health—As noted previously, the Committee met in October with officials of the Clinical Center of the National Institutes of Health and visited the Clinical Center in Bethesda, Md In recent years, some physicians and scientists in other fields have become increasingly concerned about the growth of federal expenditures for research in Federal institutions and in university and other non-federal facilities Concern has also been expressed that the Clinical Center in Bethesda is providing services unrelated to research which should be provided by private physicians The Committee has, therefore, been studying both facets of the federal research programs

The former is obviously of great import to the medical profession, since the Department of Health, Education, and Welfare provides approximately one quarter of *all* funds for research in the medical and biological sciences in the United States Most of this money is allocated to the National Institutes of Health for their own projects and for grants to non-federal institutions and individual researchers The patterns of federal research grants, the effect of these grants on private institutions, and the ways in which the federal government is affecting the overall medical research picture in the nation are all under consideration

In regard to the Clinical Center itself, although admission regulations are intended to ensure that patients will be admitted only as required for specific research projects and only on referral from their own physicians, these regulations are so broad that this intent may sometimes be circumvented However, there is no evidence that such practices are widespread or general It will welcome, however, any reports from individual physicians concerning misinterpretation or abuse of the regulations of the National Institutes of Health

Impact of Government—In June, 1960, the Council assigned to the Committee on Federal Medical Services the responsibility for a study on 'The Impact of Government Financing on Health Care' The objectives of the study will be to determine the extent and growth of government involvement in medicine in recent decades, to explore the effect of governmental health programs on the private practice of medicine, and to examine organized medicine's policies toward and its relationship with government medical care programs Governmental health programs will be examined at all levels of government—Federal, state and local—and all types of governmental involvement

The general headings under which government impact will be considered include The government as a purchaser of medical care, the government as a competitor of the private practitioner, and the government as a scientist, educator, and builder Since this study will include programs which do not fall within the scope of Federal medical services, except as they affect private medical practice, the Committee will be working with other Committees and other departments of the Association as necessary

COMMITTEE ON AGING

The membership of the Committee remained the same during the year and is as follows Drs Frederick C Swartz, Chairman, Lansing, Mich, David B Allman Atlantic City, N J, Gunnar Gundersen, LaCrosse, Wis, Henry A Holle, Staten Island, N Y Theodore G Klumpp New York, N Y, Henry B Mulholland, Charlottesville, Va, Edward H Williams, Miami, Fla, Cecil Wittson, Omaha, Neb, and Hoyt B Woolley, Idaho Falls, Idaho

Dr Edward L Bortz, Philadelphia Pa, is a consultant Staff members are Mr George W Cooley Committee Secretary, and Mr John Guy Miller

Projects and Activities Completed

Committee Meetings—The Committee held two regular meetings in Chicago—Dec 12, 1959, and April 23-24, 1960, and various committee members held special meetings with representatives of the constituent and component medical societies participating in the eight Regional Conferences on Aging A special half-day session on aging was sponsored during the 1960 Annual Meeting in Miami, Fla Entitled Management of the Older Patient," this scientific program featured papers on Risks and Results of Surgery,' "Current Concepts of the Aging Process,' Medical Management,' Maintenance of Activity,' and "Psychiatric Management' Individual members of the committee have also helped plan or actively participated in the meetings of other organizations, both national and local in scope

Regional Conferences—During the past year the Committee completed eight Regional Conferences on Aging, co-sponsored with 41 constituent medical associations and involving both lay and professional leaders from diverse fields of interest These conferences, patterned roughly after the first such meeting held in Salt Lake City, May 8-9, 1959

(described in the last Annual Report of the Council), were held in 1959 in Boston (September), Minneapolis and Cleveland (October), Kansas City (November), and in 1960 in San Francisco (January), New Orleans (February), Atlanta (March), and Baltimore (March)

These conferences have focused widespread attention on the need for a broader understanding of the true needs, the health status and the capabilities of older people Over 5,500 representatives from agriculture, industry, labor, churches, schools, government, women's groups, service clubs, retired persons' organizations, communication media, and civic planning groups, as well as medicine and other professional groups were in attendance Included in the discussions were the social, economic, and vocational factors which contribute to good health and meaningful living among older people, and ways in which opportunities for continued good health and full living could be enhanced by individual, group, and community action

Through these conferences the A M A assumed leadership in the field of aging and laid the groundwork for each state medical association to do the same A significant by-product of the conferences and the publicity related to them is at least the beginning of a new public image of the American Medical Association emphasizing a positive approach to the much used terms "needs" and "problems"

State Medical Association Activities—The success of the regional conferences was in a large measure due to the leadership displayed by the constituent and component medical societies involved Each conference included a special meeting with the chairmen and representatives of state society committees on aging to permit exchange of information on pre-White House Conference planning activities and a discussion of the projects and problems encountered by each state association in the field of aging generally

State associations, and their committees on aging have progressed rapidly not only in planning but also in filling any so-called "gaps" or "needs" that might seem to exist in their localities The committees, in the 50 states and the District of Columbia have continued to develop and implement positive programs in the field of aging Their activities have included sponsorship of conferences on aging for both lay and professional leaders, promotion of health maintenance programs, special surveys of older people, their needs and the resources available in the community and state to meet these needs, the sponsoring of voluntary health insurance and prepayment programs for persons over 65, testimony before federal and state government committees holding hearings on aging, improvement of state and local indigent care programs, stimulation of nursing home construction, promotion of homemaker services, home care programs, rehabilitation service in nursing homes, and other special health care programs, educational programs to acquaint the public with medicine's continuing positive programs on behalf of older people, leadership in formation of state joint councils to improve health care of the aged, special articles or issues by state medical journals devoted to aging, and in many states extremely active participation in state and local activities related to the 1961 White House Conference on Aging

Chronic Illness Newsletter—The *Chronic Illness Newsletter* was published bi-monthly during the year Emphasis in this publication is on specific programs and projects at community and regional levels of initiative Mailing list for this publication continues at approximately 7,000 although frequent requests are received for extra copies of various issues and *Newsletter* articles have been reprinted in a number of other publications

Homemaker Services Bulletin—The National Conference on Homemaker Services, co-sponsored in February, 1959, by the American Medical Association, 26 other national voluntary organizations, and eight units of the Department of Health, Education, and Welfare aroused widespread interest in the expansion of homemaker service programs throughout the country As a result, in January, 1960, publication of a *Homemaker Services Bulletin* was started on a bi-monthly basis The *Bulletin* is expected to be published temporarily by the American Medical Association, pending the formation of a permanent organization to promote the growth of homemaker services

The four issues of the *Bulletin* published to date have been concerned primarily with reports and recommendations of the 1959 National Conference and follow-up activities Subsequent issues will emphasize how communities can establish and use homemaker services Publication of the *Bulletin* is supervised by an Editorial Advisory Committee composed of Mr Elwin Miller, Chairman of the National Committee on Homemaker Services, Mr Harold Hagen, American Public Welfare Association, Mrs Paul E Rauschenbach, Regional Vice President, Woman's Auxiliary to the American Medical Association and Miss Florence E Austin, Executive Director, Visiting Nurse Association of Hartford, Connecticut Mrs Lucille M Smith, of the U S Public Health Service, was the Executive Secretary of the National Conference on Homemaker Services, and presently acts as a consultant in preparation of the *Bulletin* The mailing list includes over 7,700 individuals and organizations and is expanding daily Because of the relative newness of this publication additional copies of the *Bulletin* are in constant demand Over 900 extra copies of the first issue were distributed on individual request shortly after publication

Medicine's Blueprint—This concise description of the medical profession's positive program on aging

remains much in demand Some 15,000 copies of this printing have been distributed during the year in response to requests, bringing the total distribution to date to over 40,000

Health Aspects of Aging —This is another publication for both lay and professional use, and its popularity required reprinting another 15,000 copies during the year Designed as the first of a series of compilations on the subject, 'Health Aspects of Aging' has received far more attention and demand than anticipated and the Committee plans subsequent pamphlets to incorporate current articles Many local chapters of the American National Red Cross are using it in their Fitness After Forty' programs of health education for the general public

Conference Reports —The report of the Regional Conference on Aging held in Boston in September, 1959, was published and distributed separately to the participants and to executive secretaries and the chairmen of state committees on aging

Reports on the remaining seven Regional Conferences were combined into a single document not as a complete proceedings of each conference, but rather as a representative selection of the speeches, panels, and discussions, chosen for geographic, organizational, and topical representation Again, copies have been sent to participants, executive secretaries, and chairmen of state and local committees on aging and are available for distribution on request

Projects and Activities in Progress

1961 White House Conference on Aging —Official delegates to the White House Conference for the American Medical Association are Drs J Lafe Ludwig, Los Angeles, Calif, Hoyt B Woolley, Idaho Falls, Idaho, David B Allman, Atlantic City, N J, and Ernest B Howard, Chicago, Ill As members or consultants to the National Advisory Committee to the White House Conference, Drs Leonard W Larson, Bismarck, N D, Frederick C Swartz, Lansing, Mich, Edward L Bortz, Philadelphia, Pa, Theodore G Klumpp, New York, N Y, and Mr John Guy Miller, A M A Department of Medical Service will also have delegate status At the time of this report most states have not named their delegates to the White House Conference but indications are that many doctors of medicine will be nominated by the various Governors

As of June 30, 1960, 24 states had held conferences in preparation for the White House Conference In the majority of these, medicine has been effectively represented Most of the remaining states will have held their conferences by October The Committee on Aging has continued to advise and alert state medical associations It has maintained close liaison with the associations and their committees on aging, and has urged aggressive participation by medicine in state pre-conference activities To accelerate state medical society interest in their own state meetings, the Committee on Aging held a National Conference in Preparation for Medicine's Participation in the White House Conference on Aging, in Chicago in April Representatives of 44 state medical associations reviewed the current status of pre-White House Conference activities in each state, considered solutions to related problems facing medicine at the state level, and stimulated increasingly effective participation by medicine in pre-conference planning In regional discussion groups, participants explored problems and activities pertinent to their areas The general tone of regional reports was one of optimism, tempered by a realization that increased efforts are necessary While medicine's participation in some of the states was not all that could be desired, there was unanimous recognition of the need for accelerated activity on the part of constituent and component societies

Through periodic memoranda and special communications, the Committee continues to keep state medical societies informed of current developments in regard to the White House Conference and the field of aging generally

Joint Council to Improve Health Care of the Aged —A major activity of the above named Council has been to stimulate the formation of similar joint councils at the state level The Committee on Aging has cooperated by urging constituent medical associations to take the initiative in establishing such joint councils As of this report 29 states have actively functioning joint councils and at least 12 additional states are now planning such councils Fourteen of the 29 joint councils now organized have included other organizations in addition to the medical, dental, hospital and nursing home associations in their membership

Trends and Comments

Attention to the older population, and to the process of aging itself, has continued unabated during the past year Sparked by the 1961 White House Conference on Aging, the number of state and local meetings and conferences devoted to older people has been greater than at any other period There seems to be a growing recognition that a new attitude toward aging is required on the part of young and old alike Repeatedly community leaders have emphasized that the primary need is for education of the public to the increased capabilities of older people and to their fundamental need to continue as productive members of society This emphasis has been reinforced through public statements by key officers of the A M A, supporting the association s position in favor of flexible retirement and similar programs which recognize the increased health and abilities of older citizens There is evidence also of a growing public acceptance of the need for reappraisal of attitudes toward their own aging

In the specifics of health care, there is an increasing appreciation of the values to be derived from continuous health maintenance programs, and the early application of restorative procedures even when unrelated to vocational rehabilitation There is likewise an increased awareness of the importance of home-centered approaches to care of the sick oldster Most older people who are ill prefer to remain in their own homes, and many can be more satisfactorily cared for in this setting

The provision of such supportive services as organized home care programs, homemaker and visiting nurse services can help maintain the older patient in this psychologically therapeutic environment, and often affect a cost saving as well With this in mind, the *Committee recommends the endorsement and encouragement of further experimentation and application of such home-centered programs of care The Committee also recommends further application of other new experiments in providing better health care, such as rehabilitation education services in nursing homes, chronic illness referral centers, and progressive patient care in hospitals*

These shifts in public attitude toward the cardinal points in Medicine's Blueprint for the New Era of Aging reflects the effectiveness of state and county medical society initiative

During the past year, there has been a demonstrated desire on the part of the public—particularly at state and local levels—for counseling and leadership by physicians and medical societies in the field of aging The response of constituent and component societies to this public demand, as noted elsewhere in the report, has been good

If this leadership is to continue to grow, more and more physicians must recognize the impact which the extension in longevity will have on their practice of medicine Today there are 16 million people over 65 By 1970 there will be over 20 million Since 1900 the number of persons over 65 has increased three times as fast as has the total population

The shift in the average age of the population and the increasing numbers of older people mean that more and more of the physician's professional time will be spent with older patients This extension in longevity, moreover, has been accompanied by an increase in health and capacity for living among persons of all ages This increase gives promise that the achievements and satisfaction to be gained in serving older patients can be great

For this reason, the *Committee recommends an increased emphasis at all levels of medical education on the new challenges being presented to the physicians in health care of the older person, on the growing opportunities for effective use of health maintenance programs and restorative services with this age group, and the importance of a total view of health, embracing social, psychological, economic and vocational aspects* Further, the Committee commends the initiative displayed by medical societies and individual physicians during the past year in developing and implementing positive programs for older people at state and local level, and *encourages continued leadership and participation by the medical profession in community programs for seniors*

Not all trends are encouraging, however The aged—those over 65 years—have been brought into the political limelight The combination of an election year and the natural desire by some elected officials for votes of older people has heightened Congressional activity directed toward federal subsidization of health care Various groups, notably AFL-CIO and APWA, are supporting those politicians who advocate passage of Federal compulsory health insurance proposals within the Social Security mechanism Ignoring all sound medical advice, those who seek votes at any price may well reverse the great progress being made in meeting medical, economic, social, and mental needs being posed by the revolution in longevity The same is true of labor's desire (and in some instances management's policies) to hurry people out of the working force and put them on the retirement shelf Reversal of progress is equally evident in public welfare's desire to encourage dependency in the aged instead of maintaining productive activity

Regardless of the race for votes and any resultant legislation, public attitudes toward aging must change or millions of older citizens will become a loss to the nation, their communities, their families, and to themselves The seeds of progress have been sowed widely, and all who wish to live longer better should join in opposing any panaceas, legislative or otherwise

Committee Exhibits.—The Committee, in cooperation with the Communications Division, has developed three exhibits on aging These exhibits have been used by 18 state and county medical societies and para-medical groups, including the 1959-60 Regional Conferences on Aging

COMMITTEE ON INDIGENT CARE

There has been no change in the Committee's membership during the past year Current members are Drs John Flack Burton, Oklahoma City, Chairman, Albert J Bowles, Seattle, I Jay Brightman, Albany, Wesley W Hall, Reno, H Philip Hampton, Tampa, Eugene A Ockuly, Toledo, and Dean W Roberts, Chicago Committee consultants are R M Hilliard, Chicago, and Mr Nelson B Neff, Reno Staff members are Mr George W Cooley, Committee Secretary and Mr James Fleming

Projects and Activities Completed

Meetings and Regional Conference—The Committee held one full meeting during the year, in

Chicago in September At this meeting, the Committee met with the members of the Subcommittee on Drugs of the American Public Welfare Association's Medical Care Committee to review studies that have been made relative to welfare drug expenditures

The Committee sponsored a Regional Conference in Reno, Nev, in April on problems in Public Assistance medical care, with particular reference to drug expenditures It was attended by medical association representatives from California, Idaho, Nevada, Utah, and Washington, and by welfare department representatives from California, Idaho, Nevada, New Mexico, Oregon, Utah, and Washington Representatives also attended from the Nevada Pharmaceutical Association and from the Regional Office of the Federal Department of Health, Education, and Welfare

Advisory Council on Public Assistance—The 1958 amendments to the Social Security Act established an Advisory Council on Public Assistance, to make a one-year study and report to Congress on the administration of Public Assistance and the relationship between state and federal governments in financing these programs In October, Dr Burton and Dr Hampton appeared before this Advisory Council in Washington to present recommendations concerning possible changes in the administrative format of the Act and in the actual administration of the program at the state and federal levels

Among the recommendations presented were (a) permit states the option of consolidating Public Assistance medical care *at the state level*, (b) more complete and effective reporting of medical services provided through Public Assistance, (c) increased medical staffing in the Federal Bureau of Public Assistance, and (d) increased liaison between the medical profession and the welfare administrators at the local, state, and federal level

Although the final recommendations of the Advisory Council contain some suggestions to Congress with which the Committee is not in agreement, the Committee suggestions were well received and some of the recommendations were incorporated in the final statement, albeit in somewhat modified form

Medical Services Conference—The Committee on Indigent Care participated in the Medical Services Conference sponsored by the Council on Medical Service at Dallas on November 30 Dr Burton moderated a panel discussion on 'Public Welfare Medical Care" and Dr Hampton represented Florida on the panel Other states represented on this panel were California, Illinois, Colorado, and Washington During the discussion various mechanisms for health services to the needy were explained, and relationships between welfare programs and physicians were explored

Projects and Activities in Progress

Welfare Drug Expenditure Study—In Supplementary Report C of the Council on Medical Service, presented to the House at the 1959 Clinical Session, the joint study with the Subcommittee on Drugs of the American Public Welfare Association's Medical Care Committee was reported The goal of the study is a set of "guidelines" whereby medical associations and welfare agencies, working together, may keep welfare drug expenditures at a reasonable level, without adversely affecting the quality of medical care provided

(In this context, "welfare agency" is used to indicate whatever public agency administers the medical care program for the needy, it includes, therefore, not only welfare departments but also health departments and special agencies in states and localities where such agencies are responsible for care provided)

The April conference in Reno was one step in the Committee's study By meeting with representatives from the western states, committee members obtained a cross-sectional view of the problems involved in provision of welfare drugs and in budgetary limitations, as well as medical reactions to the various systems proposed or in operation for reducing drug expenditures

The Committee scheduled a second regional conference for New York City in July, to which 10 eastern state medical associations and welfare agencies have been asked to send representatives On the completion of this conference, the committee plans to meet again with the APWA group to establish the "guidelines" by which more economy, without sacrifice of medical efficacy, can be achieved in welfare drug expenditures

Since this study has aroused considerable interest, not only among welfare agencies and physicians but also among those manufacturing and dispensing ethical drugs, the Committee believes it appropriate to point out that its study concerns primarily the methods by which the medical profession and the welfare agencies, working together, can reduce welfare drug expenditures In the course of its studies the Committee, of course, amassed and considered a large amount of data concerning drugs and drug costs, but it is limiting its recommendations to its particular field of competence This study, therefore, does not conflict with the more general study of the pharmaceutical industry authorized by the House of Delegates at the June, 1960, session

Following the July conference and meeting with the APWA subcommittee, the Council will present a full report, including such suggested 'guidelines' as are agreed upon, in a Supplementary Report to the House of Delegates

Quality and Adequacy of Indigent Care in Selected Areas—Detailed investigations of Public Assistance medical care made by Committee mem-

most of them do not have the benefit of the advice of physician counselling, therefore, it is of paramount importance that physicians in private practice make every effort to consider the contribution they can make in further promoting the health and safety of the worker in his work environment Screening examinations and health counselling activities provide opportunities for the early detection and prevention of some illnesses and prompt referral for appropriate care for previously undetected illnesses Such opportunities represent ample justification for the private practitioner to be concerned with occupational health programs

Projects and Activities in Progress

Guides to Physician Relationships with Medical Care Plans—In its previous report, the Committee reported that the adoption of the recommendations of the *Report of the Commission on Medical Care Plans* provided a basis for the development of such guides This is due in part to the action of the House of Delegates which has resulted in a general improvement in relationships with the group of Miscellaneous and Unclassified Plans and a more wholesome atmosphere for the exchange of opinions with these plans In a determined effort, therefore, to implement the action of the House taken at the 1959 Annual Session and that taken by the House at the 1957 Clinical Session in adopting Pennsylvania Resolution No 24, the Committee gave these Guides priority over all other activities (The House will recall that its instructions in 1957 were that " the appropriate committee or council engage in conferences with third parties to develop general principles and policies which may be applied in the relationship between third parties and the medical profession ")

Two meetings with these plans—one held on Oct 17, 1958, with medical directors of union and consumer-sponsored plans and another on Oct 24, 1959, with medical directors of management sponsored plans—helped to lay some of the groundwork for the development of these Guides As this report is being prepared, the Committee, with advice and assistance from the Committee on Insurance and Prepayment Plans, the Council on Medical Service and the Council on Occupational Health, has completed the draft of a set of guides to be used for discussion purposes with medical directors of plans and medical society representatives from various areas of the country

At least two of the projected four regional meetings are expected to have taken place by the time the House meets in Washington, D C To these meetings, which are being scheduled in New York (on August 1), Chicago (on September 9), Washington and San Francisco, will be invited over 60 medical directors and medical society representatives Their comments and suggestions will be considered by the Committee and Councils in the final preparation of the Guides

The development of these Guides, it will be frankly admitted, has been no easy task Among the problems encountered are those involving

(a) The need for conciseness and brevity so that basic guidelines can be delineated which serve to improve understanding between all types of medical care plans, state and local medical societies, and physicians,
(b) Determination of the breadth and scope of such guides (as prepared for the discussions which are to take place, the guides encompass the responsibilities of *all* medical care plans and programs and of *all* levels of the medical profession as they apply to voluntary health insurance and medical care plans), and
(c) The perennial question of how to phrase Association policy on free choice of physician so that it may be consistent with previous actions of the House of Delegates

The formulation of policy on free choice, as made at the 1959 Annual Session appeared to the Committee to have established a realistic basis for reaching agreement with medical care plans The subsequent action at the 1959 Clinical Session has been viewed by many physicians and some medical societies as introducing certain ambiguities which detract from its earlier efforts In the Guides, the Committee has attempted to incorporate the essence of the intent of the House, it believes, however, that modification of the action at the 1959 Clinical Session—to approximate more closely the action taken on the *Report of the Commission on Medical Care Plans*—may be necessary before the guides can be completed and presented for consideration

A M A Policy Statement on Compulsory Retirement Practices in Industry—In its report to the House at the 1959 Clinical Session the Committee reported on a pilot survey it had conducted revealing a widespread pattern of restrictive employment and retirement practices towards older workers in industry The statement of the House of Delegates at the 1960 Annual Session on this subject favoring "voluntary, gradual and individualized retirement," has prompted a number of individuals to inquire into the validity of such an opinion and to request that, if necessary, studies be made of this problem The Committee has been assigned the task of reviewing various facets of the problem of compulsory and voluntary retirement and to render an opinion to the Councils on Medical Service and Occupational Health whether the action of the House is consistent, or at variance, with the facts as they relate to retirement practices and attitudes towards persons who attain age 65

The Committee has assembled for its review and consideration (1) the results of several studies made among the working population and (2) expressions

of opinion pro and con compulsory retirement On the basis of its analysis of the data available, the Committee hopes to be able to arrive at some conclusions and recommendations for the further guidance of the Association in assessing its policy statements on retirement practices in industry The Committee believes that it will be able to determine if the American Medical Association policy statements are consistent with the facts presently available on the ability and desirability of older workers to continue working after age 65, or whether additional studies are needed The Committee will pay particular attention to elements such as comparative job performance, safety and work absence data, ability of older workers to get along with other employees, and management experience and practices

Trends and Recent Developments

United Mine Workers of America—During the year, the Committee has received no complaints or problems from constituent medical associations concerning relationships with the Fund The Executive Medical Officer of the United Mine Workers of America Welfare and Retirement Fund addressed a communication to the Committee in January, requesting a survey team to visit the coal mining areas served by the 10 Memorial Hospitals, and submit a report on the changes in medical facilities and the quality and quantity of medical care which have taken place since the original (A M A) survey in 1952 " Serious consideration was given to this request by the Committee and the two Councils The Chairman of the Committee has replied to the communication, advising the Executive Medical Officer that, The consensus of both councils was that the guides currently under development represent a major effort on the part of the Association to comply with the recommendations and policy actions adopted by the House of Delegates on at least two previous occasions They (the Committee and Councils) expressed the opinion that further consideration of your request would be given upon completion of such guides and their adoption by the House of Delegates "

Unions Health Centers—In keeping itself informed of various union health center developments, the Committee has become aware of a situation in one of the states where an optometrist, in promoting so called eye care centers, is supervising the provision of diagnostic and ambulatory medical care to members of several unions Steps have been taken to advise the AFL-CIO of the deleterious results which are certain to result if the reported practices continue

The Committee notes that the Community Health Association in Detroit has announced that it will start operations during the early part of 1961 This community-sponsored program of which Walter P Reuther is President, will offer fairly complete hospital, medical and surgical services through a local hospital Other medical centers will be established as groups of physicians agree to participate in the program In Chicago, the Amalgamated Meat Cutters and Butcher Workmen have established the Beef Boners and Sausage Makers Medical Center Approximately 4,500 employees and 7,500 dependents will receive diagnostic and ambulatory medical care Seven part-time internists will provide these services, a group of 15 consultants in other specialties will be utilized on a fee-for-service basis as needed Enabling legislation in New York will permit the future establishment in Rochester of a diagnostic and ambulatory health center by the Amalgamated Clothing Workers of America, and the addition of ambulatory medical care to the health center program of the Amalgamated Laundry Workers in New York City

The Committee notes with interest the announced intentions of a number of unions in the East, Midwest, and West to consider the possibility of pooling separate health and welfare funds for the purpose of joint action and planning in the purchase of health care benefits and exchange of information on various economic and legislative aspects pertaining to medical care Of particular interest to the profession will be the declared efforts of the Group Health Association of America to issue a "Medical Bill of Rights' which will contain model statutes for state legislation to permit the establishment of labor and community-sponsored medical care programs That Association has also stated that it will attempt to amend licensure laws to enable physicians who move to other states to secure licenses more easily

Review Committees and Perpetual Clinical Profiles—The Committee wishes to call particular notice to a recent development in several states which has been receiving increasing attention among the medical profession and the lay public This development which involves the establishment of *review committees and perpetual clinical profiles* demonstrates the willingness and ability of the medical profession to create procedures and mechanisms which will help to assure the rendition of good medical care, to eradicate abuses of voluntary health insurance benefits, and to provide methods for the resolution of problems which arise in the provision of medical care to the public Among some of the outstanding examples which merit the study by all constituent associations are the programs of the Pennsylvania Medical Society (A Program of Improved Medical Service), Nassau County (New York) Medical Society, Alameda-Contra Costa (California) Medical Association, San Joaquin Foundation for Medical Care (Stockton, Calif), Wayne County (Michigan) Medical Society and the Kentucky State Medical Association Other societies have undoubtedly developed or are considering similar programs, and the Committee

would welcome learning about them and the work they are doing along these lines

The Committee strongly recommends that all constituent associations seriously undertake a study of the need and desirability of establishing committees which would accomplish the goals and objectives of such programs Such action will assist materially in identifying the medical profession even more closely with its concern for the quality and cost of medical care and the utilization of benefits provided through voluntary health insurance mechanisms

COMMITTEE ON MATERNAL AND CHILD CARE

The members of this Committee are Drs Philip S Barba, Chairman, Philadelphia, Pa, R B Chrisman, Jr, Coral Gables, Fla, W L Crawford, Rockford, Ill, James F Donnelly, Raleigh, N C, Harold S Morgan, Lincoln, Neb, Garland D Murphy, Eldorado, Ark, and Howard A Nelson, Greenwood, Miss Committee consultants are Drs Donald A Dukelow, Chicago, Ill, Philip F Williams, Bala Cynwyd, Pa, and Mr Edwin J Holman, Chicago, Ill In addition, Sydney H Kane, M D, Philadelphia, Pa, has served as a consultant on the request of the Committee Staff members are Mr George W Cooley, Committee Secretary, and Mr Donald B Berg

Projects and Activities Completed

Meetings—During the year, the Committee held one regional conference in San Francisco (March, 1960), two committee meetings (December, 1959, and March, 1960) and three sub-committee meetings (August, 1959, January and April, 1960)

Record Forms and Perinatal Code Sheet—In August, 1959, an ad hoc sub-committee met in Philadelphia to develop and select record forms and a code sheet for physician and hospital use in keeping with recommendations previously agreed upon and published in the Committee's booklet on "A Guide for the Study of Perinatal Mortality and Morbidity" In this project the sub-committee conferred with Sydney H Kane, M D, chairman of the Philadelphia County Medical Society's Committee on Maternal and Child Health, and David Hoover, Ph D, a statistician representing Richard L Masland, M D, Director of the National Institute of Neurological Diseases and Blindness

In December the Committee met in Chicago and reviewed and revised the code sheet and forms developed by the sub-committee and agreed upon the basic essentials for a supplement to the perinatal study guide Representatives at this meeting from other groups were Craig Muckle, M D, Philadelphia, Secretary of the American College of Obstetricians and Gynecologists and David Hoover, Ph D, Washington, D C, of the National Institute of Neurological Diseases and Blindness Emphasized was the need for hospital and physician record forms that would be sufficiently comprehensive to obtain necessary information and yet simple and brief enough to be utilized by the large numbers of hospitals and practicing physicians throughout all parts of the country who do not have the assistance that is available in large medical centers

In January, 1960, the sub-committee conferred personally in Washington, D C, with Richard L Masland, M D, and his staff on the national collaborative project of the Institute on the proposed perinatal code sheet Agreement was reached on the code sheet and on the fact that the NINDB and proposed A M A projects would complement each other and not be in conflict

The second Committee meeting and regional conference in San Francisco were devoted primarily to explaining the Committee's work on maternal and perinatal mortality and morbidity studies and discussing ways and means of promoting such studies In addition, the conference was co-sponsored by the National Institute of Neurological Diseases and Blindness to present its collaborative project for the study of cerebral palsy, mental retardation, and other neurological and sensory disorders of childhood

The third ad hoc sub-committee meeting was with the Committee on Maternal and Perinatal Health of the American College of Obstetricians and Gynecologists in Cincinnati to reconcile differences in the A M A Committee's record forms with those being developed by the A C O G Committee

Publications—The "Guide for the Study of Perinatal Mortality and Morbidity" has had widespread acceptance Copies were initially sent to state and county medical societies, and a joint mailing, under the sponsorship of the A M A and the A H A was made to all hospitals with over 500 deliveries a year Beyond this the large number of copies sent have been on the basis of individual requests with a total distribution to date of over 16,000 booklets

The supplementary material for the study of perinatal mortality and morbidity has been published and contains the items referred to in earlier parts of this report as well as essential data relating to implementation of the Committee's pilot study and long range program on perinatal problems

White House Conference on Children and Youth—Four members of the committee and Dr Dukelow, committee consultant, had active roles in this White House Conference Dr Barba was a vice-chairman of the President's National Committee and chairman of the Program Committee Dr Nelson prepared a survey paper that was published in a pre-conference volume to provide participants with specific background information on each major

theme with which the conference was concerned Dr Crawford and Dr Nelson were official representatives of the A M A, and Dr Donnelly was a representative of his state Dr Dukelow was a medical studies consultant to the White House Conference on loan from the A M A for about seven months As one of his duties Dr Dukelow assisted the staff of the conference in preparing the preconference volumes on the 'States Report" and the National Organizations Report" and in editing survey and reference papers relating to health and medicine During the conference Dr Dukelow acted as recorder for the proceedings of Forum 10 During the pre conference meeting with physicians attending the conference he gave a brief history of the White House Conferences on Children and Youth since their origin in 1909

Projects and Studies in Progress

Regional Conferences—The regional meetings to acquaint the medical profession with the maternal and perinatal guides and to promote their use will be continued with special attention to the Rocky Mountain, New England and Southeastern States

Study Materials—The committee will continue to improve record forms and other materials designed to be utilized by busy practitioners who deliver and care for mothers and infants Plans are being made for the establishment of a central tabulation and processing center as an essential part of the effort to stimulate hospital perinatal study and evaluation at the local level

An A M A Perinatal Code Sheet, being developed by the Committee, will be distributed to voluntarily participating hospitals This code sheet will consist of an original and a duplicate copy The completed original will remain locally as a part of the hospital record and the duplicate forwarded to the processing center The processed and tabulated data will be returned to the hospital each month for study and evaluation by that hospital's perinatal committee and staff

Perinatal Pilot Study—As pointed out in last years annual report, the relatively stagnant statistical picture of deaths and damage in the perinatal period will become increasingly greater as our child population increases Many of these problems can be avoided by concerted effort now, in following through on the Committee's proposed long range nationwide program to reduce infant mortality and morbidity (Infant mortality rates have actually increased during the past three years)

This program is designed to improve the quality of patient care by (1) encouraging physicians and hospitals to maintain good records, (2) providing a technique which will be useful in investigating the problems in the perinatal period, (3) encouraging physicians to recognize the value of statistical studies, and (4) promoting self analysis and evaluation of techniques, procedures, and results at the local level

With reference to the number one item—the need for good records—this has been emphasized in the Committee's guide booklet on perinatal studies The Committee has done something more specific about it, too, by developing and recommending the use of a "Prenatal Record," an "Obstetricians Newborn Record," and other forms included in the "Supplement to the Guide" now being made ready for distribution

The "Prenatal Record' form was developed by the Committee in cooperation with the Committee on Maternal and Perinatal Health of the American College of Obstetricians and Gynecologists and has the College's Executive Board approval

The Obstetricians Newborn Record" form is also the result of cooperative work with the above mentioned Committee of the American College of Obstetricians and Gynecologists It is a modification of a form suggested by the American Academy of Pediatrics in its publication on 'Hospital Care of Newborn Infants

Items two, three, and four are to be accomplished through a specific proposal to provide Perinatal Code Sheets to each voluntarily participating hospital, and provide, also, a processing and tabulating center from which useful data will be returned to that hospital for local committee study and evaluation

To initiate this program will require a pilot study of approximately 100,000 deliveries The cooperation of the Sperry Rand Corporation has been obtained to provide facilities for modern machine and electronic data processing Procedures and techniques of operation will be perfected during the pilot study Physicians and hospitals can then become acquainted with and accustomed to the program, and as the scope of the program grows, a larger proportion of the total deliveries each year can be included in the program

Publications

An important corollary to the work of the Council in collecting facts, data, and opinions with respect to medical service is the publication of reports and informational literature While a majority of the pamphlets are prepared for physicians and medical associations, many of them are also of interest to paramedical groups, libraries, and students interested in various phases of medical care

Members of the Council and its committees have played an active role in evaluating the need for and in reviewing copy for such publications Wherever policy is involved, these members have determined the phraseology to reflect the views of the profession as accurately as possible

The list of publications which follows will give the House a succinct picture of the interlocking

functions and scope of activities of the Council and its committees

Voluntary Prepayment Medical Benefit Plans—1959
Charts and Graphs—Supplement to Voluntary Prepayment Medical Benefit Plans—1959
A Buyer's Guide to Voluntary Health Insurance
Hospital, Surgical, and Medical Expense Benefits
Disability Insurance
Suggested Guides for Medical Society-Sponsored Voluntary Prepayment Medical Benefit Plans
Proceedings of Regional Conferences of Committee on Insurance and Prepayment Plans—Portland, Denver, Minneapolis
Voluntary Health Insurance and Prepayment Plans (Use, Not Abuse)
Charts and Graphs—1960—Statistical Data on Voluntary Prepayment Medical Benefit Plans
Relation of Physicians and Hospitals
Guides for Medical Care in Nursing Homes and Related Facilities
Listing of Group Practices in the United States
Organized "Home Care" Programs in the United States—rerun 1957 edition
Proceedings of Workshop on Hospital-Nursing Home Relationships—Joint publication of AHA, AMA, ANHA, USPHS, and Blue Cross Commission
Summary of a Survey of Nursing Homes, 1958-1959
Chronic Illness Information Centers (Chicago, Milwaukee, San Francisco, and Cleveland)
Medicine's Blueprint for The New Era of Aging—A Positive Health Program for Older Citizens—revised edition
Suggested Guides for Medical Society Committees on Aging—rerun 1958 edition
Health Aspects of Aging—rerun of 1957 edition
How Sick Are Older People
Rocky Mountain Regional Conference on Aging—Salt Lake City, Utah
Regional Conference on Aging—Boston
Report of Regional Conferences on Aging (Minneapolis, Cleveland, Kansas City, San Francisco, New Orleans, Atlanta, and Baltimore)
Chronic Illness Newsletter (issued bi-monthly)
Homemaker Services Bulletin (issued by-monthly)
Federal Medical Services Newsletter
A Guide for the Study of Perinatal Mortality and Morbidity
A Preliminary Guide for Measuring Work Absence Due to Illness and Injury—rerun of 1958 edition
A Survey of Management Health Centers, 1959
Survey of Physicians' Services in Small Plant Occupational Health Programs
Guides for Medical Societies in Developing Plans for Tax-Supported Personal Health Services for the Needy—rerun of 1956 edition
Proceedings of Medical Services Conference—Dallas, November 30, 1959
1959 Nationwide Survey on County Medical Society Activities—joint publication with Communications Division

Respectfully submitted,
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T J DANAHER, M D
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WILLARD A WRIGHT, M D
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CARLTON E WERTZ, M D, Vice Chairman
J LAFE LUDWIG, M D, Chairman
MR GEORGE W COOLEY, Secretary

COMMITTEE ON MEDICAL PRACTICES

The following members of the House of Delegates comprise the Committee Drs Lester D Bibler, Chairman, Indianapolis, J S DeTar, Milan, Mich, James P Hammond, Bennington, Vt, James M Kolb, Clarksville, Ark, and Elmer G Shelley, North East, Pa Committee staff are Mr George W Cooley, Secretary, and Mr Murray Klutch, Assistant Director, Department of Medical Service

By the time the House convenes in Washington, the Committee will have completed six regional conferences on relative value studies, covering the entire country The conferences will have been held in San Francisco (April 11, 1959), Boston (July 18, 1959), Indianapolis (Sept 12, 1959), Washington, D C (March 26, 1960), Omaha (Sept 17, 1960), and Atlanta (Nov 5, 1960) With broad representation from medical society committees and councils, specialty organizations, Blue Shield plans and insurance organizations, the Committee has had adequate opportunity to present to the medical profession a significant, yet sometimes controversial, development in the socio-economics of medicine

Inquiries addressed to the Committee from medical societies throughout the country, articles in medical society bulletins and journals, stories in the lay press, and the discussions and meetings which

have taken place—virtually in every state—attest to the importance and gravity of the issues which relative studies were first designed to meet and overcome Actions of the House of Delegates at the 1958 Clinical Session, and reaffirmed at the 1959 Clinical Session (1) approved of relative value studies in principle, (2) authorized the Committee on Medical Practices to conduct regional conferences for the purpose of informing constituent medical associations of the purpose, scope and objectives of such studies, and (3) authorized the Committee to assist those associations desiring to undertake relative value studies Interest manifest throughout the entire country has demonstrated that these decisions were correct ones

As this report is being prepared, 12 state medical associations (Arkansas, California, District of Columbia, Iowa, Kansas, Michigan, Minnesota, Montana, Nebraska, North Dakota, South Dakota and Utah) have adopted relative value studies * Four associations (Hawaii, Nevada, Oregon, and Washington) use them as guides, and two (Arizona and Maine) use this study for one or more programs A recent count showed that 19 states were studying the advisability of adopting such studies, with six states and a similar number of counties conducting original studies or resurveys Four states (Colorado New Mexico, Oregon and Texas) have opposed the adoption of relative value studies, as have at least two county societies

A survey conducted by the national Blue Shield organization in the early part of this year revealed that 12 state-wide Blue Shield Plans (Arizona, California, Florida, Hawaii, Iowa, Maine, Michigan, Montana, Nebraska, Oregon, South Carolina, and Utah) were using relative value studies One plan (North Dakota) is scheduled to use such a study sometime this year, and three plans (New Jersey, Oklahoma and Texas) use the study with some modifications Two plans (New Hampshire and Vermont) use the study as a guide At least seven plans are currently studying the use of such studies These figures do not include approximately 10 local Blue Shield plans which are either using or studying the use of relative value studies

The significant point to this tabulation is that there are more than 25 states in which state or county medical societies, or state or local Blue Shield programs, are utilizing the relative value study concept This does not, of course, include Medicare schedules, most of which are based upon the relative value concept

To be added to the foregoing are the actions of several specialty groups Relative value studies have been adopted by the American Society of Internal Medicine and the American College of Radiology They have been approved in principle by the American Academy of General Practice and the College of American Pathologists, with both organizations leaving decisions for adoption or rejection up to local chapters These studies have been opposed by one organization of physicians, the Association of American Physicians and Surgeons Approval of relative value studies has been given by the Health Insurance Council

The Committee does not wish to burden the House with a lengthy recitation of the need it sees for relative value studies as an instrument whereby the medical profession can identify itself with a progressive development in the economics of medicine, in protecting the interests of the patient and the physician, and in relieving the physician of the manifold problems connected with health insurance benefit structures From what it has observed, the Committee's belief that such studies are vital to the future of medical practice has been strongly reinforced The regional conferences constituted a forum—not to proselytize—but to acquaint physicians with facts as they exist They provide an opportunity for proponents and opponents, and those who 'want to be shown,' to discuss various points of view and to take the story back home where decisions will be made Participants at these conferences attend in order to learn if relative values offer the promise and hope of resolving problems which are becoming heavier to bear as pressure from various sources increases In the final analysis it is only they and the physicians in their societies who will arrive at a decision which they feel is best for them This is certainly medicine s way of solving problems and is a technique physicians are accustomed to in everyday life

The next step in the Committee s activity is to bring together to one meeting representatives of all areas in which relative value studies are in effect Out of such a meeting an exchange of methods, techniques and applications of relative values can be developed to serve as a source of information for the future Even at this stage, we must acknowledge that relative value studies are in their infancy As medical societies become accustomed to their use and application, the studies will become more efficient tools and guides

The Committee is grateful to the House for its encouragement, and trusts that it will continue to have its confidence to continue its activities

Respectfully submitted,

LESTER D BIBLER, M D , Chairman
JAMES P HAMMOND, M D
J S DETAR, M D
JAMES M KOLB, M D
ELMER G SHELLEY, M D

*One state (Vermont) approved the principle of relative value studies but at the date of this report had not adopted a study

COMMITTEE ON RELATIONSHIPS BETWEEN MEDICINE AND ALLIED HEALTH AGENCIES

Members of the Committee are Drs Sidney J Shipman, Chairman, San Francisco, Calif, Paul A Davis, Akron, Ohio, Paul C Swenson, St Paul, Minn, Alfred Popma, Boise, Idaho, Leonard W Larson, Bismarck, N D, Louis A Buie, Sr, Rochester, Minn, David B Allman, Atlantic City, N J, and David A Wood, San Francisco, Calif Staff members are Mr George W Cooley, Secretary, and Dr Donald Dukelow, Consultant

Meetings—The Committee has met on two occasions during the past year—in New York City Oct 31-Nov 1, 1959, and in Chicago May 7-8, 1960

The Committee has as two of its objectives (1) to review programs of the various national voluntary health agencies, and (2) to offer the Committee's services to such agencies on matters concerned with medical care, medical research, health education and medical profession relationships

To carry out these objectives the Committee has met with representatives of most of the large national voluntary health agencies The Oct 31-Nov 1 meeting was designed to further these objectives and was concerned with the medical service programs and medical relationships of these agencies Through conferences of this nature the voluntary health agencies are given an opportunity of discussing their programs and problems with the Committee The Committee is convinced that this is a necessary mechanism for improving understanding and communications between organized medicine and voluntary health agencies and may well be important in the continuation of voluntary programs

The May 7-8 meeting was concerned with Resolutions 3, 4 and 18 (introduced into House at the 1959 Annual Session) and included representatives of The National Foundation and the Tennessee and Louisiana State Medical Associations

The National Foundation

Recent sessions of the House of Delegates have brought forth a number of resolutions on the new and expanded program of The National Foundation

Resolutions 3 and 4 submitted to the House of Delegates in June, 1959, by the Tennessee Delegation concerned the functions of medical advisory committees of The Foundation's local chapters The Committee met with representatives of Tennessee and The National Foundation on two occasions in order to resolve differences As a result of these meetings, a substitute resolution was drawn up strengthening the local medical advisory committees This substitute resolution was submitted to the Board of Trustees and referred by the Trustees to and adopted by the House of Delegates in June 1960 Actually, this substitute resolution constituted a "Guide for Medical Advisory Committees" and, as such, will be made available to all constituent and component medical societies

Resolution 18, submitted to the House of Delegates in June, 1959, by the Louisiana Delegation concerned disapproval of the expanded aims of The National Foundation Again, the Committee discussed the Foundation's new program with representatives of Louisiana and The National Foundation The Committee also considered data on the present status of polio and the Salk Vaccine, as well as the impact of the expanded program of The Foundation on the private practice of medicine A report and resolution on these subjects were submitted to the Board of Trustees in June, 1960 The essence of this report was that the A M A should go on record "Urging The National Foundation to give serious thought to the completion of its original duties before undertaking additional responsibilities in connection with poliomyelitis victims instead of diluting its finances and its capabilities by assuming new responsibilities in areas already covered by other national voluntary health agencies" The report was amended by the Board, substituting a recommendation for further conferences with The National Foundation in place of the previous statement of the Committee The House of Delegates adopted the Report as amended

Publications

The Committee has developed two brochures—*Suggested Guides to Relationships Between Medical Societies and National Voluntary Health Agencies* and *Handbook for Medical Societies and Individual Physicians on National Voluntary Health Agencies*

The *Handbook* is actually a supplement to the *Guides* and is divided into three major sections Section One contains information on 24 major national voluntary health agencies, including the major purpose of each, an outline of their organizational structures, data on how funds are raised and expended, and program details of concern to the medical profession Section Two contains a brief descriptive paragraph on 10 national agencies which are not considered (according to the Committee's definition) to be voluntary health agencies but are agencies of medical interest Section Three contains the Committee's "Suggested Guides" mentioned in the previous paragraph

This *Handbook* has had a wide acceptance by physicians, medical societies, voluntary health agencies, and libraries From the commendatory letters received and the remarks of many persons the Committee has every reason to believe that this type of *Handbook* serves as an excellent reference directory Such has been the demand that during the first six months 5,000 copies of the *Handbook* have been distributed on request

The *Handbook* is now in the process of being updated, and additional agencies will be included The second edition is to be published this fall

Studies or Projects in Progress

The Committee plans to complete the series of conferences with medical directors of voluntary health agencies and agencies of medical interest listed in the *Handbook* The Committee also plans to hold conferences with medical directors of agencies that are not listed in the *Handbook* to obtain a complete picture of voluntary health agency activities and expand this publication to include all voluntary health agencies that have national significance

Resolution 22, submitted to the House of Delegates by the New Jersey Delegation in June, 1960 concerns fund raising organizations The resolution adopted by the House of Delegates was referred to the Board of Trustees and, in turn, directed to the attention of this Committee for study of the problems involved At this time the Committee would like to submit its suggestions for the disposition of this resolution

It is the consensus of the Committee that Resolution 22 actually embodies concepts toward which the Committee has been working Each of the projects undertaken to date has been a step in meeting the resolution which reads as follows

> "*Resolved,* That the American Medical Association accept the paramedical obligation of securing comprehensive financial, scientific, and sociological data that may, after adequate study, be used to acquaint our profession and the public concerning the need, the monetary efficiency of fund procurement and disposition, and the use of such funds obtained by these agencies

While all of the questions raised by such a resolution may not be statistically or empirically answered, much can be done to assist the public and the profession in evaluating the requests of many institutions, organizations and agencies competing for public funds in the name of improved health care programs

The Committee has already established liaison and met with most of the major fund raising organizations and believes it enjoys the confidence and cooperation of these groups Therefore, the Committee s program for the coming year will include a thorough follow-up on Resolution 22 in an effort to seek means and a basis for evaluating fund raising agencies in the health field and so informing the profession and the public

THE JUDICIAL COUNCIL

In June 1960 the Judicial Council said goodbye to one of the most faithful and diligent workers it has ever had Dr L A Buie— Gus —who was elected to the Council in 1945, completed his term of service and retired The records show that he was one of the most regular in attendance at Council meetings throughout these years This in itself is the more remarkable because Dr Buie was also a member and chairman of the Council on Constitution and Bylaws for part of this period It was in this dual capacity that he became so closely identified with the revision of the Principles of Medical Ethics in 1957 The members of the House of Delegates know full well the time and effort contributed by Dr Buie to the completion of the present edition of the Principles

Dr Buie s eager desire to serve his Association, his generous devotion of time and energy, and his genuine warmth and friendliness have carved a memento of him in our hearts Our tribute to him on his retirement is but a reiteration of the obvious On behalf of the members of the Judicial Council and for the members of the House of Delegates, we extend congratulations and best wishes

Resolution No 35

A resolution (No 35) was introduced at the Dallas (December 1959) meeting on behalf of the California delegation The purpose of the resolution was to add a new section to the Principles of Medical Ethics It was suggested that the proposed section state that the exploitation of his position by a doctor is unethical and that neglect of patient, unnecessary services, excessive fees, and unnecessary resort to ancillary facilities are all forms of exploitation The Reference Committee on Amendments to Constitution and Bylaws, to which this resolution was referred, reported that in its opinion the Principles of Medical Ethics need not be changed to accomplish the objectives of the resolution The Committee requested, however, that the Judicial

Council study the resolution and report its conclusions in its next report

The Judicial Council has given very serious consideration to this matter It commends the California delegation for its interest in the matter As the Council has so frequently pointed out, interest in the Principles must be developed as much on local level as on national level The Council, however, agrees with the Reference Committee that the Principles themselves need not be amended to accomplish the purpose of this resolution

To give written assurance to the membership of the Association, the Judicial Council now expresses its opinion that it is unethical and contrary to Section 4 of the Principles of Medical Ethics for a physician to be false in any manner to the trust imposed in him by his patients It is also unethical and contrary to Section 4 of the Principles for a physician to neglect his patient or to provide or prescribe unnecessary services or unnecessary ancillary facilities It is also the opinion of the Council that the charging of an excessive fee is unethical and is contrary to Section 7 of the Principles, which provides in part that the physician's "fee should be commensurate with the services rendered and the patient's ability to pay"

The Judicial Council would ask the House of Delegates to approve the above opinion as official policy of the Association for the guidance of its members and all medical societies seeking to inculcate a higher sense of ethical responsibility in their membership

Proration of Insurance Benefits

At the request of the Board of Trustees, the Judicial Council gave serious consideration during the year to the matter of proration of insurance benefits and the division of surgical fees In its study the Council worked in close collaboration with the Council on Medical Service A joint statement of the two councils was drafted and submitted to the Board of Trustees for its consideration

In a somewhat related area the Judicial Council prepared, and THE JOURNAL published, two opinions regarding the ethical propriety of a surgeon employing an assistant In these the Council expressed the opinion that it is not unethical for a surgeon to employ another physician to aid and assist him and to pay the assistant for his services The Council also expressed the opinion that this may be done on a per-case or full-time basis, the controlling factors being the status of the second physician and his relationship with and his legal responsibility to the patient The Council said in these opinions—and it repeats now for emphasis—that the second physician must actually be an assistant to—an employee of—the surgeon When two physicians individually render care to the same patient, then each should submit a bill for the services performed and each should receive compensation direct from the patient or his representative If the employment of a doctor as an assistant is not bona fide, if it is a subterfuge to split fees, or if the second doctor is not, in fact, an assistant and an employee of the surgeon, then the practice is unethical and is vigorously condemned

Honor and Dignity of the Profession

In connection with the above opinion regarding the employment of an assistant by a surgeon, the Judicial Council believes it is important to stress a basic premise which influences its thinking as it arrives at its opinions and reports The premise is that the overwhelming majority of physicians are ethical and are sincerely motivated to observe the ethics and the traditions of the profession Interpretations of ethical principles are made by the Judicial Council in the light of what is to be permitted or to be authorized or to be practiced by the great majority of ethical physicians

A small minority of physicians, of course, can and sometimes do take advantage of the broad general opinions of the Council For example, in its last Annual Report the Judicial Council stated its opinion that it is not unethical for physicians to participate in the ownership of pharmaceutical companies This opinion has been improperly interpreted by some as opening the door to unethical practices

The Council is faced with this question Shall the rights of the majority of ethical physicians be curtailed in order to prevent the unethical few from finding another opportunity to pursue their selfish interests? The Council believes the answer is clear The rights of the majority should be protected, and this majority acting through their local medical societies, should emphatically and definitely censure the few who take advantage of a situation for their personal and selfish interests

The local medical society is the strong right arm of the medical profession As it demands of its members respect for medicine's principles of ethics and as it demonstrates that its members are of high ethical stature, the public will respect and admire the profession of medicine and its members If the county societies fail to require adherence to ethical principles, public admiration and respect for the medical profession will be lessened

Opinions and Reports

The Judicial Council published a collection of its opinions and reports as a special edition of THE JOURNAL in June, 1958 This special edition was mailed to subscribers of THE JOURNAL, and approximately 15,000 additional copies were distributed to medical students, physicians, medical societies and their committees, educational institutions, and other associations interested in ethical principles

It is the plan of the Council to have these opinions and reports reprinted from time to time In addition, it plans to distribute copies of Opinions and Reports annually to each senior medical student with the compliments of the Association Future reprintings will maintain the volume on a current basis by the addition of new opinions which are published from time to time in THE JOURNAL It is hoped that before long these Opinions and Reports will be familiar to all doctors and will be accepted as an authoritative treatise on questions of medical ethics Suggestions and comments from the members regarding the material contained in the Opinions and Reports will always be welcome

Respectfully submitted,
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GEORGE A WOODHOUSE, M D
HOMER L PEARSON, M D, Chairman
EDWIN J HOLMAN, Secretary

REPORT OF THE WOMAN'S AUXILIARY

To the Members of the House of Delegates of the American Medical Association

The Woman's Auxiliary to the American Medical Association had a busy, eventful 1959-60 Our 37th year of service to our parent organization terminated at convention in Miami Beach in June with all states reporting outstanding work This year we had asked each member to "accept individual responsibility for better community health' Summing up our total efforts we feel that we may be justifiably proud of our contribution to the betterment of health

Dr Louis Orr gave us our prime incentive for the year when he said One of the greatest functions that the Woman's Auxiliary can perform is to act as an educational force for medicine He went on to say, 'I would suggest that the auxiliary assume the task of launching an educational program to tell the full story about the so-called 'free hospital and medical care for the retired beneficiaries of the Social Security Act"

All state auxiliaries set about informing the membership first, and great emphasis was placed on study of medical costs, hospital costs, insurance plans, and proposed legislation relative to medicine We feel that we have a well informed membership spreading the full story about medicine throughout every United States community Our legislative chairmen have been particularly busy, and thousands of letters were written to Congressman about our views on medical legislation

Auxiliary members attended and participated in the area meetings of the A M A on problems of the aging Many members joined with other groups to study needs of older citizens in their own communities and initiated projects to better and brighten their lives

Auxiliaries—especially in New Jersey have done a terrific job in launching Homemaker Service in dozens of communities Our members can and have accepted the challenge to develop programs to bring a happier, healthier, and fuller life to our mature citizens by strengthening and expanding community services

Much Auxiliary time and effort is spent in interesting young people in health careers Forty-five state auxiliaries sponsor Health Career Clubs," they number 1,931 Four hundred fifteen new clubs were organized this year and 1,148 scholarships and loans were made Auxiliaries gave $167,158 in scholarships and $69,493 in loans for a total of $236,651—an increase of $41,161 for the year We believe these figures speak for themselves Our members appreciate our responsibility to help interpret the needs and opportunities for the widening horizons of careers in medicine and health

A record total of $175,010 was raised by our members for A M E F This surpassed last year s donation by $35,000 and marks the first time that the Auxiliary ever surpassed the A M E F goal for the year A $5,000 gift was made by the National Auxiliary as a memorial to our deceased members Each year we have had increased donations and interest in aiding medical education—our total contribution for A M E F from 1951 to date amounts to $836,810 Each auxiliary has been asked to plan at least one fund-raising effort for A M E F for 1960 61 to insure another record increase in our donations to medical education

The Auxiliary has cooperated with the National Safety Council and promoted all phases of their program At the Convention in Miami Beach a fine demonstration of water safety was given S W A T — Safe Water Activity Training" was adopted as a slogan for special emphasis at this time It is hoped that every member of every doctor s family will learn to swim this year

We also have very active committees on Civil Defense, Mental Health, and Rural Health carrying on programs in these areas We participate in all of these phases of endeavor as the county medical societies and the needs of the local communities suggest

We were successful in reaching our goal of 80,000 members this year We tried to impress on doctors' wives, not members of the Auxiliary, the benefits derived from joining our ranks

We enjoy friendly relations within our own ranks and we believe that all that one wishes to accomplish community-wise can be done through the Auxiliary, since our program places emphasis on health education, vocational guidance for young people, support of medical and scientific education, and intelligent participation in government and community service

The division heads of the A M A were most helpful and have given assistance to our national and state officers and chairmen, particularly at our fall Conference, and at the A M A conferences we were privileged to attend Our president and president-elect and the respective chairmen attended A M A Public Relations Institute, Committee on Civil Defense, Council on Mental Health, Council on Rural Health, the meeting of physicians and schools, National Health Forum, Conference on Aging, the Institute for Health Insurance, area meetings on Legislation, and A M E F meetings

We are especially indebted to Mr Leo Brown and many of the members of his staff in the field of communications and community service Dr Ernest B Howard, our liaison to the Advisory Council, is well known to many of our members for his excellent presentations of A M A news at Convention and at our fall Conference All officers and chairmen are grateful for his guidance and council

We know that we have better informed members since the publication of the *AMA News* Our members read it, quote it, and enjoy it

Our 1959-60 president, Mrs Frank Gastineau served as a recorder at the White House Conference on Children and Youth and through this experience gained much valuable experience and information As is customary, she attended as many state meetings as possible, speaking at 34 state conventions or conferences Other officers and chairmen represented our organizations in the remaining states

Our work goes forward each year, coordinated by a wonderful office staff under our efficient executive secretary, Miss Margaret Wolfe We know how lucky we are that the A M A provides us with our fine office space at 535 North Dearborn

We would like all doctors to know the 80,000 wives of physicians pledge at every meeting to give you our loyalty and devotion, support your activities, and sustain your high ideals

Mrs William Mackersie, President

THE SCIENTIFIC PROGRAM

NATIONAL GUARD ARMORY

The Council on Scientific Assembly presents the Scientific Program for the Washington Clinical Meeting to the medical profession as a postgraduate medical forum on the daily problems which must be faced and mastered by the practicing physician Each subject is presented as a unit through symposiums, panels, and lectures Four specially constructed rooms in the Armory will be used for the program, including color television and motion pictures

Color television will originate from Georgetown University Hospital and will be presented each morning except Thursday Medical motion pictures will be presented each afternoon, as well as Thursday morning, and will include the most outstanding films on subjects carefully selected for this meeting

Three breakfast round tables will be held at the Statler–Hilton Hotel on Tuesday and Wednesday, Nov 29 and 30, at 7 15 a m Each breakfast will be limited to 40 doctors Tickets will be available at $3 00 each, including the gratuity, in the Registration Area of the Armory

The Scientific Exhibit will be grouped by clinical areas and will be available for continuous study from Monday morning until Thursday noon Since the entire Scientific Program, with the exception of the early morning breakfasts, is being presented in the Armory where a restaurant is also available, the visiting physician may come early in the morning and remain at the Armory all day

The Council on Scientific Assembly expresses its appreciation to the local Committee on Arrangements in Washington for its splendid suggestions, excellent cooperation, and the painstaking efforts it has contributed toward making this program both interesting and educational

Dr Donald H Stubbs, General Chairman of Arrangements, Dr Alfred E Brigulio, Chairman, Committee on Scientific Program, Dr Charles A Hufnagel, Chairman, Color Television Committee, Dr Edward W Nicklas, Chairman, Motion Picture Committee, and Dr J Ross Veal, Chairman, Scientific Exhibit Committee, have all made major contributions to the program and have been very active during the past year Dr James A Dusbabek, who arranged the manikin demonstrations on problems of delivery, is also cited for his untiring efforts to complete this special feature of the program Mr Theodore Wiprud, Secretary of the Medical Society of District of Columbia, has been most cooperative at all times

Appreciation is also extended to Smith, Kline & French Laboratories, Philadelphia, for its part in the presentation of the color television program

The program begins on Monday morning, November 28, and continues until Thursday noon Dec 1

PANEL DISCUSSIONS ROOM A

Monday morning, Nov 28

Chairman PETRENA ABBE SHEA Washington, D C

9 30-11 30

Panel Discussion on the Management of Breast Nodules

THEODORE WINSHIP, Washington, D C, Moderator
Participants ERNEST A GOULD, Washington, D C, KENNETH W WARREN, Boston, MILTON FRIEDMAN, New York, GUY W HORSLEY, Richmond, Va, and JEANNE C BATEMAN, Washington, D C

Monday afternoon, Nov 28

Chairman DONALD H STUBBS, Washington, D C

1 30-3 00

Panel Discussion on the Solitary Pulmonary Nodule

FORREST V SCHUMACHER, Washington, D C, Moderator
Participants JOSEPH W PEABODY JR, Washington, D C, WILLIAM F BARRY JR, Durham, N C, WILLIAM NEWMAN and JOHN W TRENIS, Washington, D C

3 00-4 30

Panel Discussion on Nodules of the Neck

CALVIN T KLOPP, Washington, D C, Moderator
Participants MURRAY M COPELAND, Houston, Texas, ARNOLD J KREMEN, Minneapolis, BERNARD ZIMMERMANN, Morgantown, W Va, and BARTON McSWAIN, Nashville, Tenn

Tuesday morning, Nov 29

Chairman JAMES W WATTS, Washington, D C

9 30-11 30

Panel Discussion on Acute Renal Failure and the Artificial Kidney

GEORGE E SCHREINER, Washington, D C, Moderator

The Etiology of Acute Renal Failure
FREDERIC B WESTERVELT JR, Washington, D C
Natural History of Acute Glomerulonephritis
ALVIN E PARRISH, Washington, D C
Abnormalities of Nitrogen Metabolism in Acute Renal Failure
ALBERT L RUBIN, New York

Acid Base Problems in Acute Renal Failure
DAVID SELIGSON, New Haven, Conn
The Electrolyte Problems in the Management of Acute Renal Insufficiency
LEWIS W BLUEMLE JR, Philadelphia
Metabolic Problems Related to Prolonged Maintenance of Life in Acute Oliguric States
JOHN F MAHER, Washington, D C

Tuesday afternoon, Nov 29

Chairman JAMES W WATTS, Washington, D C

1 30-3 00

Panel Discussion on Diagnosis and Treatment of Thyrotoxicosis

ROBERT J COFFEY, Washington, D C, Moderator
Role of Anti-Thyroid Drugs
JOHN J CANARY, Washington, D C
Role of Radioactive Isotopes
J E RALL, Bethesda, Md
Role of Surgery.
THOMAS J ANGLEM, Brookline, Mass

3 00-4 30

Panel Discussion on Osteoporosis

LAURENCE H KYLE, Washington, D C, Moderator
The Physiology of Bone
FRANKLIN C MCLEAN, Chicago
Pathology of Osteoporosis
LENT C JOHNSON, Washington, D C
Clinical Diagnosis in Osteoporosis
ROBERT A ROBINSON, Baltimore
Therapy in Osteoporosis
G DONALD WHEDON, Bethesda, Md

Wednesday morning, Nov 30

Chairman J F FINNEGAN, Washington, D C

9 30-11 30

Panel Discussion on Medical and Surgical Management of Chronic Bronchopulmonic Disease

JAMES J FEFFER, Washington, D C, Moderator
Physiological Applications
BEN V BRANSCOMB, Birmingham, Ala
Medical Aspects
MAURICE S SEGAL, Boston
Surgical Approach
OTTO C BRANTIGAN, Baltimore

Wednesday afternoon, Nov 30

Chairman THOMAS S SAPPINGTON, Washington, D C

1 30-3 00

Panel Discussion on The Diarrheas

ROBERT S SMITH, Washington, D C, Moderator
Chronic Ulcerative Colitis.
GARNET W AULT, Washington, D C
Amebiasis
G GORDON MCHARDY, New Orleans, La
Regional Enteritis
SAMUEL MCLANAHAN, Baltimore
Functional Disorders of the Gastrointestinal Tract
WILLIAM K BILLINGSLEY JR, Washington, D C

3 00-4 30

Panel Discussion on The Periodic Health Examination

I PHILLIP FROHMAN, Washington, D C, Moderator
Cardiovascular Approach
BENJAMIN MANCHESTER, Washington, D C
Cancer Approach
EMERSON DAY, New York
The Cytological Viewpoint
MAURICE FREMONT-SMITH, Boston
The Clinical Pathologist's Viewpoint.
GEORGE Z WILLIAMS, Bethesda, Md

Thursday morning, Dec 1

Chairman GORDON MACDONALD, Washington, D C

9 30-11 30

Panel Discussion on Recent Advances in Uses of Antibiotics and Steroids

THOMAS MCPHERSON BROWN, Washington, D C, Moderator
Participants MONROE J ROMANSKY, Washington, D C, EDWARD F ROSENBERG and HARRY F DOWLING, Chicago

SYMPOSIUMS ROOM B

Monday morning, Nov. 28

Chairman GEORGE E SCHREINER, Washington, D C

9 30-11 30

Symposium on the Patient and Coronary Artery Disease

A CARLTON ERNSTENE, Cleveland, Moderator
(Co-sponsored by the Scientific Council, Washington Heart Association)
Can Coronary Patients be Predicted by Clinical or Physiological Measurements?
THOMAS W MATTINGLY, Washington, D C
Fat Metabolism as a Background to the Development of Coronary Atherosclerotic Disease
DONALD S FREDRICKSON, Bethesda, Md
Genetic Background of Patients with Coronary Vascular Disease
VICTOR A MCKUSICK, Baltimore
Management of the Dietary and Psychological Problems of the Patient with Coronary Disease
EUGENE A STEAD JR, Durham, N C
Coronary Disease from the Patient's Viewpoint
CLARENCE B RANDALL, Washington, D C, Special Assistant to President Eisenhower

Monday afternoon, Nov 28

Chairman CLAYTON B ETHRIDGE, Washington, D C

1 30 3 00

Round Table on Myocarditis

PHILIP A TUMULTY, Baltimore, Moderator
Discussors WILLIAM C MANION, W PROCTOR HARVEY, and THOMAS W MATTINGLY, Washington, D C

3 00-4 30

Round Table on Pericarditis

J WILLIS HURST, Atlanta, Ga, Moderator
Discussors JOHN J EVANS, Washington, D C, R J PEARSON, Bethesda, Md, and GEORGE E SCHREINER, Washington, D C

Tuesday morning, Nov 29

Chairman W ROSS MORRIS, Washington, D C

9 30-11 30

Symposium on Edema of Extremities—Mechanisms and Methods of Management

ANDREW G PRANDONI, Washington, D C, Moderator
Management of Edema of Extremities Due to Lymphatic Obstruction and Venous Insufficiency
VICTOR DE WOLFE, Cleveland
Physiology and Mechanisms of Edema
FREDERIC C BARTTER, Bethesda, Md
Lymphography and Venography
ROBERT E WISE, Boston

Tuesday afternoon, Nov 29

Chairman THEODORE J ABERNATHY, Washington, D C

1 30 3 00

Symposium on Psychiatry and the Personal Physician

ZIGMOND M LEBENSOHN, Washington, D C, Moderator
The Anxious Patient
LEO H BARTEMEIER, Baltimore
The Depressed Patient
SEYMOUR J ROSENBERG, Washington, D C
The Alcoholic Patient.
MARVIN A BLOCK, Buffalo, N Y
The Chronically Ill Patient
PAUL E CHODOFF, Washington, D C

3 00-4 30

Symposium on Portal Cirrhosis

HOWARD E TICKTIN, Washington, D C, Moderator
Enzymes and Liver Disease
HYMAN J ZIMMERMAN, Chicago
Ammonia Metabolism
SAMUEL P BESSMAN, Baltimore
Hepatic Coma
B H SULLIVAN JR, Washington, D C

Wednesday morning, Nov 30

Chairman BENJAMIN MANCHESTER, Washington, D C

9 30-12 00

Symposium on Clinical Nutrition

JOHN B YOUMANS, Chicago, Moderator
The Diagnosis of Nutrient Deficiencies
The Clinical Appraisal by Physical Examination
WILLIAM MCGANITY, Galveston, Texas
The Clinical Appraisal by Biochemical Evaluation
WILLIAM PEARSON, Nashville, Tenn
The Clinical Appraisal by Anthropometric Evaluation
STANLEY M GARN, Yellow Springs, Ohio
The Dietary Appraisal
GEORGE V MANN, Nashville, Tenn
The Management of Dietary Inadequacies
Principles—Food or Supplements?
ROBERT L JACKSON, Columbia, Mo
Round Table Can the Physician Bring About a Correction of Dietary Habits?
Discussors ROBERT E OLSON, Pittsburgh, GEORGE V MANN, Nashville, Tenn, WILLIAM MCGANITY, Galveston, Texas, and ROBERT L JACKSON, Columbia, Mo

Wednesday afternoon, Nov 30

Chairman VICTOR R ALFARO, Washington, D C

12 00-1 00

Symposium on The Present Status of Poliomyelitis Immunization

LEROY E BURNEY, Washington, D C, Moderator
Introduction
LEROY E BURNEY, Washington, D C
Extent of the Problem
RUSSELL ALEXANDER, Atlanta, Ga
Standardization, Licensing and Availability of Vaccine
RODERICK MURRAY, Washington, D C
Epidemiologic Consideration
ALEXANDER LANGMUIR Atlanta, Ga
Summary of Future Plans
LEROY E BURNEY, Washington, D C

1 30-3 00

Symposium on Benign Diseases of the Lower Esophagus

BRIAN B BLADES, Washington, D C, Moderator
Medical Management
IRVING B BRICK, Washington, D C
Surgical Management
DONALD B EFFLER, Cleveland
Radiological Aspects
WILLIAM W STANBRO, Washington, D C

3 00-4 30

Symposium on Virus Infection in Common Respiratory Disease

ROBERT J HUEBNER, Bethesda, Md, Moderator
Participants JOSEPH A BELL, ROBERT M CHANOCK, KARL M JOHNSON, and LEON ROSEN, Bethesda, Md, and ROBERT H PARROTT, Washington, D C

Thursday morning, Dec 1

Chairman ALVIN E PARRISH, Washington, D C

9 30-11 30

Symposium on Hematuria and Pyuria; Etiology and Treatment

W DABNEY JARMAN, Washington, D C, Moderator
Urological Viewpoint.
RUSSELL B ROTH, Erie, Pa
Radiological Viewpoint
FRED O COE, Washington, D C
Bacteriuria Aspects
EDWARD H KASS, Boston

LECTURES ROOM C

Monday morning, Nov 28

Chairman JAMES A DUSBABEK, Washington, D C
Gynecology

9 30- 9 50 Clinical Application of Vaginal Cytology.
JED W PEARSON JR, Washington, D C

10 00-10 20 The Diagnosis and Management of Vulvar Lesions.
JOHN L PARKS, Washington, D C

10 30-10 50 Gynecologic Problems and Hygiene of the Teen Age Patient
MARY DEWITT PETTIT, Philadelphia

11 00-11 20 The Conservative Management of Genital Prolapse in the Poor Risk Patient
ANDREW A MARCHETTI, Washington, D C

Monday afternoon, Nov 28

Chairman THOMAS M PEERY, Washington, D C
Hematology

1 30- 1 50 Clinical Manifestations in Multiple Myeloma
ELLIOTT F OSSERMAN, New York

2 00- 2 20 Chemotherapy in the Lymphomas and Leukemias
LOUIS K ALPERT, Washington, D C

2 30- 2 50 Therapeutic Use of Whole Blood and Blood Derivatives
SAM T GIBSON, Washington, D C.

3 00- 3 20 The Anemias.
WILLIAM H CROSBY JR, Washington, D C

3 30- 3 50 Medicolegal Aspects of the Management of Erythroblastosis Fetalis
ALEXANDER S WIENER, Brooklyn, N Y

4 00- 4 20 Studies in Canine Hemophilia and Their Human Applications
KENNETH M BRINKHOUS, Chapel Hill, N C

Tuesday morning, Nov 29

Chairman JAMES A DUSBABEK, Washington, D C
Obstetrics

9 30- 9 50 Bleeding Problems in Pregnancy
PAUL A BOWERS, Philadelphia

10 00-10 20 The Elderly Multigravida
D FRANK KALTREIDER, Baltimore

10 30-10 50 The Abortion Problem
JOHN E SAVAGE, Baltimore

11 00-11 20 The Influence of Maternal Virus Infections on the Fetus
ROBERT H PARROTT, Washington, D C

Tuesday afternoon, Nov 29

Chairman WILLIAM S ANDERSON, Washington, D C
Pediatrics

1 30- 1 50 Accident Prevention in Children
GEORGE M WHEATLEY, New York

2 00- 2 20 Cystic Fibrosis of the Pancreas
PAUL A DI SANT'AGNESE, Bethesda, Md

2 30- 2 50 Childhood Tuberculosis
EDWIN L KENDIG, Richmond, Va

3 00- 3 20 Obesity in Adolescence.
FELIX P HEALD, Washington, D C

3 30- 3 50 Advances in Immunization
EDWARD C CURNEN, New York

4 00- 4 20 Tranquilizers as a Source of Intoxication in Children
ROLAND B SCOTT, Washington D C

Wednesday morning, Nov 30

Chairman G VICTOR SIMPSON, Washington, D C
Ophthalmology

9 30- 9 50 The Place of the General Practitioner in Children's Eye Problems
MARSHALL M PARKS Washington, D C

10 00-10 20 The Importance of the Family Doctor and Internist in the Etiological Survey of Uveitis
M ELLIOTT RANDOLPH, Baltimore

10 30-10 50 Contact Lenses
JOHN W MCTIGUE, Washington, D C

11 00-11 20 Can the Family Doctor and Internist Help in the Early Diagnosis of Glaucoma?
JOHN S MCGAVIC, Bryn Mawr, Pa

11 30 11 50 The Eye Bank and Cornea Grafts
JOHN HARRY KING JR, Washington, D C

Wednesday afternoon, Nov 30

Chairman LEONARD T PETERSON, Washington, D C
Orthopedic Surgery and Trauma

1 30 1 50 Orthopedic Problems in Children
JOHN P ADAMS, Washington, D C

2 00 2 20 Pitfalls in Common Fractures
JUSTUS C PICKETT, Morgantown, W Va

2 30 2 50 Athletic Injuries
THOMAS B QUIGLEY, Boston

3 00 3 20 Accidental Injuries of the Chest and Great Vessels
JOHN M KESHISHIAN, Washington, D C

3 30- 3 50 Automotive Crash Injuries and Their Prevention
MURRAY E GIBBENS and SAMUEL P NEWMAN, Denver

4 00- 4 20 Emergency Resuscitation Using Exhaled Air
ALLEN S CROSS, Washington, D C

Thursday morning, Dec 1

Chairman NAOMI M KANOF, Washington, D C
Dermatology and Syphilology

9 30- 9 50 Psoriasis The Value of Antimetabolites and Other Chemotherapeutic Agents
EUGENE J VAN SCOTT, Bethesda, Md

10 00 10 20 Current Concepts in the Management of Syphilis
E RANDOLPH TRICE, Richmond, Va

10 30 10 50 Dermatologic Radiation Therapy of Today
JUNE C SHAFER, Washington, D C

11 00 11 20 Treatment of Disturbances of Pigmentation
ROBERT STOLAR, Washington, D C

COLOR TELEVISION ROOM D

The following program is subject to change, depending upon the availability of cases

Monday morning, Nov 28

10 00-11 00

Mental Retardation A Treatable Disease

FREDERIC GERARD BURKE, Professor and Director, Department of Pediatrics, Georgetown University School of Medicine, Washington, D C, Moderator

Panel RICHARD M AULD, Clinical Instructor, Department of Pediatrics, Georgetown University School of Medicine
THOMAS AUTH, Associate Professor, Department of Neurology, Georgetown University School of Medicine
ANGELO D'AGOSTINO, Resident Psychiatrist, Department of Psychiatry, Georgetown University School of Medicine
ARTHUR SIMS, Clinical Associate Professor, Department of Pediatrics, Georgetown University School of Medicine
PATRICIA MARINARO, Speech Therapist, Georgetown University Medical Center
JEANNE MITCHLER, Social Worker, Georgetown University Medical Center
MARY REIDY, Psychologist, Georgetown University Medical Center

The panel will discuss certain aspects of mental retardation which can be treated Case presentations will be made which will include the child with a brain injury, the child with metabolic disease, and the child with a speech problem A family physician will charge the panel with providing him with practical material which he can then use to help the patient and his family

11 00-12 00 Synthetic Arthritic Joints

MILTON C COBEY, Professor, Orthopedic Surgery, Georgetown University School of Medicine, Moderator

Panel ALAN R CRAIN, Associate Professor, Orthopedic Surgery, Georgetown University School of Medicine
DARRELL CRAIN, Associate Professor Medicine and Head of Arthritic Department, Georgetown University School of Medicine
ROBERT C RUSH, Assistant Professor of Orthopedic Surgery, Georgetown University School of Medicine
CHARLES SHIELDS, Professor of Physical Therapy, Georgetown University School of Medicine

Surgical presentation of the uses of how compressed ovalon sponge aids in the restoration of the function of the joints severely damaged by various types of arthritis A panel will present and discuss preoperative and postoperative cases

Tuesday morning, Nov 29

10 00-11 00

Dermatology

NAOMI M KANOF, Clinical Assistant Professor of Medicine, Georgetown University School of Medicine, Moderator

Panel PAUL H JACOBS, Chief of Dermatology, United States Air Force, Andrews Air Force Base, Washington, D C

A series of case presentations will be made demonstrating some of the uncommon, but not rare, skin conditions that show up in the physician's daily practice

11 00-12 00

A Modified Approach to Surgery of the Duodenal Ulcer

CHARLES A HUFNAGEL, Professor of Surgery, Georgetown University School of Medicine, Moderator

Surgeon ROBERT J COTTEY, Professor of Surgery and Director, Department of Surgery, Georgetown University School of Medicine

Panel WILLIAM M BALLINGER, Clinical Professor of Medicine, Georgetown University School of Medicine

KARL C CORLEY, Associate Radiologist, Doctors Hospital, Washington, D C

WILLIAM S MCCUNE, Associate Professor of Surgery, George Washington University School of Medicine

Inasmuch as the operative case for the panel will be a patient with a duodenal ulcer in whom there is a clear indication for surgery, the theme for the discussions will revolve around three principal points (1) the choice of the patient for surgical treatment, (2) the choice of a physiological procedure, and (3) the results including complications following such operative treatment

Wednesday morning, Nov 30

10 00-11 00

Pathology

FRANK M TOWNSEND, Director, Armed Forces Institute of Pathology, Washington, D C, Moderator

Panel SAMUEL H ROSEN, Chief, Pulmonary, Mediastinal and ENT Branch, Armed Forces Institute of Pathology

WILLIAM L THOMPSON, Chief, Registry of Radiologic Pathology, Armed Forces Institute of Pathology

This demonstration will consist of the pathological and radiologic findings in pulmonary alveolar proteinosis, eosinophilic granuloma of the lungs and inflammatory pseudotumor of the lungs

11 00-12 00

Trauma in Peace and War

JOSEPH ROGERS YOUNG, Chief of Staff, Eastern Dispensary and Casualty Hospital, Washington, D C

Panel O HUGH FULCHER, Professor of Neurological Surgery, Georgetown University School of Medicine

JAMES W BRADEN, Chief of Surgery, Eastern Dispensary and Casualty Hospital, Washington, D C

PHILIP A CAULFIELD, Associate Professor of Surgery, Georgetown University School of Medicine, Chairman, District of Columbia Committee on Trauma, American College of Surgeons

R LOMAX WELLS, Medical Director, The Chesapeake and Potomac Telephone Companies

The vital importance of the immediate care of the severely injured person on the street, in the home, or on the battlefield is emphasized Proper early care in trauma can save lives and greatly lessen disabilities In this age of high speed, mechanization of industry, and the constant threat of nuclear warfare, every physician should be well informed on emergency care of the injured and be able to perform certain surgical procedures The public must also be educated to the point of basic understanding of the problem and the part they should be able to play

MOTION PICTURES ROOM D

Following is a partial list of motion pictures which will be shown daily from 1 30 to 5 00 p m, Monday through Wednesday, and 9 00 a m to 12 noon on Thursday

Modern Obstetrical Management (Normal Deliveries)
KEITH P RUSSELL, Los Angeles

Cystic Fibrosis
HENRY B BRUYN, JACKSON T CRANE, and HOWARD STEINBACH, San Francisco

Management of Breast Feeding
GORDON D JENSEN, Seattle

Resuscitation of the Newborn
SPECIAL COMMITTEE ON INFANT MORTALITY OF THE MEDICAL SOCIETY OF THE COUNTY OF NEW YORK

Physical Diagnosis—Communicable Diseases
LOUIS WEINSTEIN, Boston

Repair of Median Episiotomies
ROBERT H BARTER and JOHN L PARKS, Washington, D C

The Disability Decision
DEPARTMENT OF HEALTH, EDUCATION AND WELFARE, DIVISION OF SOCIAL SECURITY, BOASI and AMERICAN MEDICAL ASSOCIATION

Rehabilitation Adds Life to Years
AMERICAN MEDICAL ASSOCIATION

Current Trends in the Clinical Management of Diabetes
PETER H FORSHAM, San Francisco, HENRY DOLGER, New York and PAUL DUDLEY WHITE, Boston

If I Had an Ulcer
PHILIP THOREK, Chicago

Coccidioidomycosis
MARCO BRUSCHI, Bakersfield, Calif

Intermittent Positive Pressure Breathing
THEODORE H NOEHREN, Buffalo, N Y

Why Johnny Bleeds Collaborative Diagnosis of a Hematologic Problem
JOHN B MIALE, Miami, Fla, and WILLIAM D DOLAN, Arlington, Va

Cancer Detection Examination
AMERICAN CANCER SOCIETY, NEW JERSEY DIVISION

Medifilm Report II—109th Annual Meeting, Miami Beach, Fla
AMERICAN MEDICAL ASSOCIATION

Disinfection of the Skin
CARL W WALTER, Boston

The Silent Witness (Chemical Tests for Intoxication)
AMERICAN MEDICAL ASSOCIATION and AMERICAN BAR ASSOCIATION

BREAKFAST ROUND TABLES STATLER HILTON HOTEL

Six breakfast round tables will be held in the Statler-Hilton Hotel, three on Tuesday morning and three on Wednesday morning Attendance at each breakfast will be limited to 40 persons Tickets will be available at $3 00 each, including the gratuity, in the Registration Area of the Armory

Following are the subjects to be discussed at each breakfast, the speaker, and the place

Tuesday morning, Nov 29

Chairman SEYMOUR ALPERT, Washington, D C
7 15-8 45

To Do or Not To Do

1 **Tonsillectomy**
VICTOR R ALFARO, Washington, D C
New York Room

2 **Therapeutic Abortion**
HENRY C FALK, New York
California Room

3 **Hypothermia in Surgery**
C R STEPHEN, Durham N C
Ohio Room

Wednesday morning, Nov 30

Chairman SEYMOUR ALPERT, Washington, D C
7 15 8 45

Problems of Management

4 **Management of Threatened and Habitual Abortion**
ROBERT H BARTER, Washington, D C
New York Room

5 **Management of Pain**
HENRY K BEECHER, Boston
California Room

6 **Management of the Patient with Tranquilizer Drugs**
OTIS R FARLEY, Washington, D C
Ohio Room

THE SCIENTIFIC EXHIBIT

The Scientific Exhibit will be located on the first floor of the National Guard Armory with access from the Industrial Exhibit In addition to 135 individual scientific exhibits, two special features will be presented, including the Manikin Demonstrations on Problems of Delivery, and the Special Exhibit on Fractures

The Scientific Exhibit will open at 8 30 Monday morning, Nov 28 and will close at 12 noon on Thursday, Dec 1

PROBLEMS OF DELIVERY— MANIKIN DEMONSTRATIONS

Room E

Manikin demonstrations on problems of delivery will be conducted daily at 12 00 noon and 4 30 p m, Tuesday through Thursday, by a group of Washington obstetricians An opportunity for questions and answers will follow each demonstration

JAMES A DUSBABEK, Washington, D C, is in charge of the demonstrations The following schedule will be presented

Monday afternoon, Nov 28

12 00 **Normal Vertex Delivery in Lithotomy and Lateral Position**
JAMES G SITES, Washington, D C
Alternate MARVIN P FOOTER, Washington, D C

4 30 **Vertex Delivery with Local and Pudendal Block**
JAMES G SITES, Washington, D C
Alternate MARVIN P FOOTER, Washington, D C

Tuesday afternoon, Nov 29

12 30 **Persistent Occiput Posterior**
SAMUEL M DODEK, Washington, D C
Alternate WILLIAM DANDRIDGE TERRELL, Washington, D C

4 30 **Outlet Dystocia and Forceps Delivery**
RUFUS M ROLL, Washington, D C
Alternate NEEL J PRICE, Washington, D C

Wednesday afternoon, Nov 30

4 30 **Brow, Shoulder, Compound Presentation Version, External and Internal**

GEORGE E STEVENS, Washington, D C
Alternate JAMES P HARTLEY, Washington, D C

SPECIAL EXHIBIT ON FRACTURES

Spaces 301-303

The Special Exhibit on Fractures is presented under the auspices of the following committee

RALPH G CAROTHERS Cincinnati, Chairman
HARRY B HALL, Minneapolis
MILTON S THOMPSON, San Antonio, Texas

Continuous demonstrations will be conducted daily from 10 a m to 12 noon and from 2 to 4 p m, Monday morning to Thursday noon, on the following subjects

Fractures about the Ankle
Fractures of the Elbow
Fractures Resulting from a Fall on the Outstretched Hand

Basic principles will be stressed and ample opportunity will be allowed for questions Members of the committee will be present to discuss individual problems with visiting physicians A pamphlet dealing with the essential features of the exhibit will be distributed

The following demonstrators will assist the Committee in the presentation of the exhibit

JAIME M BENAVIDES, Philadelphia
ROY E BRACKIN, Winnetka, Ill
BRUCE M CAMERON, Houston, Texas
DAVID M CAMERON, El Paso, Texas
LEE J CORDREY, Tampa, Fla
CHARLES DEBOLD JR, Poughkeepsie, N Y
JOHN L DOHERTY, Boston
F PAUL DUFFY, Cincinnati
ROBERT T GALLAGHER, Cincinnati
MORRIS E GOLDMAN, Lewiston, Me
KENNETH T HUBBARD Oak Park, Ill
RICHARD H JONES, Minneapolis
WILLIAM J KISIEL, Springfield, Mass
WALTER G LUDLUM JR, New York
SYDNEY N LYTTLE, Flint, Mich
ANDREW R MAILER, Chicago
ROBERT D MANSFIELD, Cincinnati
THEODORE NORLEY, West Palm Beach, Fla
EDMUND T RUMBLE JR, Callicoon, N Y
OTTO H SALSBERY, Covington, Ky
JOHN C SCHMERGE, Cincinnati
M R SULLIVAN, Flint, Mich
FRANKLIN V WADE, Flint, Mich

CARDIOVASCULAR TOPICS

Space 102

Quinidine in the Management of Cardiac Arrhythmias

ALFRED HALPERN, NORMAN SHAFTEL, and GEORGE SCHWARTZ, Angiology Research Foundation, Great Neck, N Y

Space 103

Hypocholesterolemia Agent—A Comparative Study

PHILIP LISAN, WILBUR OAKS, SHELDON BENDER, MURRAY MILLER, WILLIAM LIKOFF, and JOHN MOYER, Hahnemann Medical College, Philadelphia

Space 104

Coronary Systemic Artery Anastomosis Its Use in Measuring Coronary Flow

ROBERT J HALL, EDWARD M KHOURI and DONALD E GREGG, Walter Reed General Hospital, Washington, D C

Space 105

Hypercholesterolemia Mechanisms and Therapy

SHELDON R BENDER, WILLIAM LIKOFF, PHILIP LISAN, DONALD BERKOWITZ, JOHN SPITZER, and WILBUR OAKS, Hahnemann Medical College and Hospital, Philadelphia

Space 106

Electrode Catheter in Cardiac Catheterization

GERALD I SHUGOLL, JOHN H MAZUR, R J PEARSON JR, JOHN J DEMPSEY, and HENRY R COOPER, U S Naval Hospital, Bethesda, Md

Space 107

The Circulation During Hypotension (Shock)

MAX HARRY WEIL, ROBERT B SUDRANN, HERBERT SHUBIN and SOL BERNSTEIN, University of Southern California School of Medicine, Los Angeles

Space 109

Anti-coagulation with Warfarin Sodium and Potassium

JOHN H NODINE, BERTRAM J CHANNICK, PETER PETREU, and ROBERT BOTNICK, Hahnemann Medical College and Hospital, Philadelphia

Space 110

Fibrinolysis in Vascular Surgery

WILLIAM G ANLYAN, DONALD SILVER, and HUGO L DEATON, Duke University Medical Center, Durham, N C

Space 111

Effect of Sodium D-Thyroxine on Serum Cholesterol in Man

WILLIAM R OWEN, WINSTON NEELY and JOHN OWENS, Hermann Hospital Cardiac Laboratory and Baylor University College of Medicine, Houston, Texas

Space 112

The Effect of D-Thyroxine on Serum Cholesterol

SAMUEL ZINBERG, EDWARD H BOWEN JR and HARRY H LEVEEN, Veterans Administration Hospital and State University of New York, Brooklyn, N Y

Space 113
Demonstration of the Coronary Arteries in Man Using Image Amplification Fluoroscopy
CHARLES E BICKHAM JR and CAROLYN EDWARDS, Washington, D C

CANCER

Space 114
The Malignant Potential of Burn Scars
CHARLES E HORTON, HUGH H CRAWFORD, and JEROME ADAMS, Norfolk, Va

Space 115
Alkylating Agents Useful in the Treatment of Neoplastic Diseases
JESSE L STEINFELD, University of Southern California School of Medicine, Los Angeles

Space 116
Changing Concepts Concerning Cancer
HARRY M NELSON, American Cancer Society, New York, and MICHAEL B SHIMKIN, National Cancer Institute, Bethesda, Md

Space 117
Virus Cancer Research
KENNETH M ENDICOTT, National Cancer Institute, Bethesda, Md

Space 119
International Aspects of Cancer
MICHAEL B SHIMKIN, National Cancer Institute, Bethesda, Md

Space 120
Chemotherapy of Cancer
H A FRECKMAN, H L FRY, E R MAURER, and F L MENDEZ JR, Cincinnati

Space 121
The Physician and Vaginal Cytology
LOIS I PLATT, JED W PEARSON JR, and WILLIAM T LADY, George Washington University School of Medicine, Washington, D C

Space 122
Chemotherapeutic Control of Cancer
JEANNE C BATEMAN and HARRY N CARLTON, Washington, D C

Space 123
Cytological Diagnosis of Epithelial Neoplasms of the Upper Urinary Tract
JAMES R POWDER, Z M NAIB, WILLIAM S KISER and JOHN D YOUNG JR, University of Maryland School of Medicine, Baltimore

Space 124
The Use of Dextromoramide Tartrate in Pain Caused by Cancer
MARTIN C SAMPSON, Old Bridge, N J

DERMATOLOGY

Space 203
Intramuscular Methylprednisolone Acetate in Allergy and Dermatology
EARL B BROWN, LAURENCE L PALITZ, THOMAS SEIDEMAN, and CHARLES J POPOVITS, Montefiore Hospital, New York

Space 204
Treatment of Emotional Problems in Allergic Disorders
JEROME MILLER, Temple University School of Medicine, Philadelphia

Space 205
Systemic Management of Pruritus with Methdilazine Hydrochloride
CHARLES M HOWELL JR, Bowman Gray School of Medicine of Wake Forest College, Winston-Salem, N C

Space 206
Griseofulvin in Ringworm Infections
MARC A WEINER, JAMES Q GANT JR, and ARNOLD H GOULD, George Washington University School of Medicine and Georgetown University School of Medicine, Washington, D C

Space 207
Systemic Therapy of Pyoderma
E RANDOLPH TRICE and MARSHALL COHEN, Medical College of Medicine, Richmond, Va

Space 208
Systemic Corticosteroid Therapy in Dermatoses
HERBERT A LUSCOMBE and HAROLD A COLBURN, Jefferson Medical College Hospital, Philadelphia

INTERNAL MEDICINE

Space 210
The Practical Management of Chest Injuries
ROBERT G TROUT, JULIO C DAVILA, and ROBERT P GLOVER, Presbyterian Hospital and Fitzgerald Mercy Hospital, Philadelphia

Space 211
Four Decades of Diuretics
RALPH V FORD, EDWARD W DENNIS, ALFREDO C MONTERO, and JOHN A NICKELL, Baylor University College of Medicine, Houston, Texas

Space 212
Oral Drugs for Diabetes
JAMES M MOSS, DEWITT E DELAWTER, JAMES B FIELD, and SIDNEY A TYROLER, Georgetown University Medical Center, Washington, D C

Space 213
Lowering Blood Pressure
ALICE I MACAULAY, Grasslands Hospital, Valhalla, N Y

Space 214

Steroids Activate Tuberculosis

JULIUS L WILSON, American Thoracic Society, National Tuberculosis Association, New York

Space 215

Catecholamine Inhibition Vs Ganglion Blockade

ALBERT N BREST and JOHN H MOYER, Hahnemann Medical College and Hospital, Philadelphia

Space 216

Appraisal and Management of Essential Hypertension

ROBERT J GILL, WILLIAM K JENSON, RICHARD B FREEMAN, W TAYLOR BRANDFASS, and GARFIELD G DUNCAN, The Pennsylvania Hospital, Philadelphia

Space 217

Treatment of Essential Hypertension A Double-Blind Study

RAYMOND F GRENFELL, ARTHUR H BRIGGS, and WILLIAM C HOLLAND, University of Mississippi School of Medicine, Jackson Miss

Space 218

Modern Patterns of Tuberculosis Treatment

EDWARD T BLOMQUIST, U S Department of Health, Education, and Welfare, Public Health Service, Washington, D C

Space 219

Diagnosis of Systemic Lupus Erythematosus

STEWART N NICKEL and C E RUPE, Henry Ford Hospital, Detroit

Space 220

The Pancreas in Human and Experimental Diabetes

BRUNO W VOLK and SYDNEY S LAZARUS, Isaac Albert Research Institute of the Jewish Chronic Disease Hospital, Brooklyn, N Y

Space 221

Visceral Aneurysms

J F FAIRBAIRN II, J A SPITTEL JR, P J OSMUNDSON, G D DAVIS, O W KINCAID, Mayo Clinic and Mayo Foundation, Rochester, Minn

Space 222

Hemobilia

HAROLD S ENGLER, ALBERTO A ZAVALETA, and WILLIAM H MORETZ, Medical College of Georgia, Augusta, Ga

Space 223

Diagnosis and Treatment of Functional Diarrhea

DONALD BERKOWITZ and LEONARD GREENBERG, Albert Einstein and Sidney Hillman Medical Centers and Hahnemann Medical College, Philadelphia

Space 224

Pilot Certification and Accident Investigation

WAYNE C LOVELL, Federal Aviation Agency, Bureau of Aviation Medicine, Washington, D C

Space 225

The Treatment of Acute Diarrheas in General Practice

MANNING J ROSNICK, Miami, Fla

ORTHOPEDIC SURGERY

Space 304

Acoustics Within the Knee Joint

ROY E BRACKIN, Winnetka, Ill

Space 305

Fractures in Children

SUNSHIK SHIM and WILLIAM J TOBIN, Children's Hospital, Washington, D C

Space 306

Correction of Clubfoot Utilizing Controlled Withdrawal Reflex

MAURICE B FURLONG and GEORGE W LAWN, Woman's Christian Association Hospital, Jamestown, N Y

Space 307

Traumatic Affections of the Cervical Spine

EUGENE G LIPOW and O HUGH FULCHER, Washington, D C

Space 308

Automobile Injuries and Their Prevention

MURRAY E GIBBENS, SAMUEL P NEWMAN, and EUGENE A GILLIS, American Academy of Orthopedic Surgery, Veterans Administration Hospital, Denver, and U S Public Health Service

Space 309

Iliopsoatic Syndromes Development of Anomalies in Man

ARTHUR A MICHELE, New York Medical College, Flower and Fifth Avenue Hospitals, New York, and U S Public Health Service Hospital, Staten Island, N Y

ARTHRITIS AND RHEUMATISM

Space 310

Surgical Treatment of the Hand in Rheumatoid Arthritis

E D HENDERSON, P R LIPSCOMB, H F POLLEY, R H FERGUSON, and A H BULBULIAN, Mayo Clinic and Mayo Foundation, Rochester, Minn

Space 311

Strike Back at Arthritis

BERNARD D DAITZ, DAVID M FRIED, WILFRED D DAVID, and JOSEPH J BUNIM, U S Public Health Service, Washington, D C, and RONALD W LAMONT-HAVERS, The Arthritis and Rheumatism Foundation, New York

Space 312
Diagnostic Clinic in Osteoarthritis
DAVID S HOWELL, HARVEY BROWN, and AUGUSTO SARMIENTO, University of Miami School of Medicine and Jackson Memorial Hospital, Miami, Fla

Space 313
Surgery of the Arthritic Hand
ROLLA D CAMPBELL JR, ROBERT C MELLORS, JOHN L SBARBARO, and L RAMSAY STRAUB, Hospital for Special Surgery, New York

Space 314
Information on Arthritis
RONALD W LAMONT-HAVERS, The Arthritis and Rheumatism Foundation, New York

Space 315
Arthritic Feet
JOHN J CALABRO, CARLO NOSENZO, and FELIX TRAUGOTT, Seton Hall College of Medicine and Jersey City Medical Center, Jersey City, N J

Space 316
Do You Have a Question, Doctor?
DONALD F HILL, Tucson, Ariz, L MAXWELL LOCKIE, Buffalo, and JOHN W SIGLER, Detroit

Space 317
Differential Diagnosis of Shoulder Pain
JOSEPH L FLEMING, ROBERT S KNIGHTON, JOHN W SIGLER, and WILLIAM C NOSHAY, Henry Ford Hospital, Detroit

Space 318
Plaster Casts and Splints in the Care of Patients Having Rheumatoid Arthritis
DAVID M FRIED, JOSEPH J BUNIM, MARIO L SALVANELLI, and VIDA JOE NIEBUHR, National Institutes of Health, Bethesda, Md

Space 319
Synoviananalysis Synovial Fluid Examination in Arthritis
RALPH A JESSAR, DANIEL J MCCARTY, ERNEST M BROWN JR, and JOSEPH LEE HOLLANDER, Hospital of the University of Pennsylvania, Philadelphia

Space 320
The Patient with Rheumatic Disease—What is Your Diagnosis?
KENNETH M KRON, IRVIN F HERMANN, RICHARD T SMITH, and JOHN C RICHARDS, Benjamin Franklin Clinic and Pennsylvania Hospital, Philadelphia

Space 321
Serological Reactions in the Connective Tissue Diseases
ARTHUR P HALL, THEODORE B BAYLES, and WADI A BARDAWIL, Robert B Brigham Hospital, Boston

Space 322
Prophylaxis and Treatment of Pyarthrosis A New Approach
PETER VIEK and SAMUEL C SANTANGELO, Bryn Mawr, Pa and Abington Memorial Hospital, Abington, Pa

Space 323
Gout Its Diagnosis and Treatment
THOMAS E WEISS, ALBERT SEGALOFF, and WILLIAM H SCHINDEL, Ochsner Clinic, New Orleans

LABORATORY AND CLINICAL INVESTIGATION

Space 401
Gastroscopic Biopsies
CLEMENT G MARTIN, W P MAVRELIS, and NELSON WRIGHT, Illinois Central Hospital, Chicago

Space 402
Clinical Evaluation of New Drugs
K G KOHLSTAEDT, S O WAIFE, and J M MAAS, Lilly Research Laboratories Indianapolis

Space 403
Role of the General Practitioner in Clinical Investigation
JAMES K MARTINS and JOSETTE ANN MARTINS, Eau Claire, Wis

Space 404
Tissue Reactions to Injections of Broad-spectrum Antibiotics
DANIEL J HANSON, Department of Pathology and Research Institute of Mercy Hospital, Toledo

Space 405
Electron Microscopy, Fluorescence Microscopy and Microenzymology in Experimental Pathology
W STANLEY HARTROFT, CARL H SMITH, and CHARLES KUHN, Washington University School of Medicine, St Louis

Space 406
Clinical Investigation in the General Physician's Practice
I PHILLIPS FROHMAN, Washington, D C

Space 407
Normal and Pathological Anatomy of the Neuromuscular Junction
JOE M BLUMBERG, SUMNER I ZACKS, and WALTER C BAUER, Armed Forces Institute of Pathology, Washington, D C

Space 409
Evolution of Urinalysis
E M KNIGHTS JR, G M LONGFIELD, and D E HOLLAND, Hurley Hospital, Flint, Mich

Space 410
Improved Friedman Pregnancy Test A New Method
JACK C NORRIS, Atlanta, Ga

OBSTETRICS AND GYNECOLOGY

Space 411

Premenstrual Tension Medical and Social Aspects
VERONICA M PENNINGTON, Mississippi State Hospital and Veterans Administration Hospital, Jackson, Miss

Space 412

Leukoplakia and Cervical Dysplasias
C R BOYCE and T B LEBHERZ, United States Naval Hospital, National Naval Medical Center, Bethesda, Md

Space 413

The Arrest of Premature Labor
EDWARD H BISHOP and THEODORE WOUTERSZ, Pennsylvania Hospital, Philadelphia

Space 414

Maternal and Fetal Effects of Obstetric Analgesia
C RAY POTTS, JOHN C ULLERY, and JAMES R BAIR, Ohio State University College of Medicine, Columbus, Ohio

Space 415

Prevention and Management of Prematurity
FREDERICK H FALLS and CHARLOTTE S HOLT, Illinois State Department of Public Health, Springfield, Ill

Space 416

Evolution of Obstetric Analgesia
JAMES D MYERS, JOHN Q ADAMS and PHIL C SCHREIER, University of Tennessee College of Medicine and City of Memphis Hospitals, Memphis, Tenn

DRUG THERAPY

Space 417

Methohexital Sodium for Intravenous Anesthesia
V K STOELTING, Indiana University Medical Center, Indianapolis, Ind

Space 418

New Chemotherapy of Systemic Mycoses
CHESTER W EMMONS and JOHN P UTZ, National Institutes of Health, Bethesda, Md

Space 419

The Mechanisms of Vomiting Clinical Evaluation of Thiethylperazine
DONOVAN C BROWNE and ROBERT D SPARKS, Tulane University of Louisiana School of Medicine and Browne-McHardy Clinic, New Orleans

Space 421

The Isolation Perfusion of Chronic Osteomyelitis with Furaltadone
CLAUDE H ORGAN, LOUIS A SOJKA and ANTHONY R CARNAZZO, Creighton University School of Medicine, Omaha

OPHTHALMOLOGY AND OTOLARYNGOLOGY

Space 420

Meniere's Disease Deficiency Disorder?
MILES ATKINSON, New York University School of Medicine, New York

Space 422

Correction of Deformed "Springs" of the Ear
LOUIS JOEL FEIT, New York Polyclinic Medical School and Hospital, New York

Space 423

The Eye at 65 and Over
DAN M GORDON, New York Hospital–Cornell Medical Center, New York

Space 424

Glaucoma
JOHN S MCGAVIC, Temple University School of Medicine, Philadelphia

PEDIATRICS

Space 501

Pediatric Diagnostic Clinic
THOMAS E CONE JR, U S Naval Hospital, Bethesda, Md

Space 502

Thalassemia in Negro Children
ROLAND B SCOTT, ANGELLA D FERGUSON, MELVIN E JENKINS, and ROSELYN PAYNE EPPS, Howard University College of Medicine and Freedmen's Hospital, Washington, D C

Space 503

A Ten-Year Study of Actual and Anticipated Advantages of a New Concept of Baby Feeding
WALTER W SACKETT JR and MARY M SACKETT, Doctor's Hospital, Coral Gables, Fla

Space 504

Chemistry, Chromosomes, and Congenital Anomalies
VIRGINIA APGAR, The National Foundation, New York

Space 505

Hemolytic Anemias in Infants and Children
SANFORD L LEIKIN, GEORGE EMMANUOLIDES, and GLORIA H ENG, Children's Hospital, Washington, D C

Space 507

Extracted Pertussis Antigen A New Approach to an Old Problem
CARL WEIHL, Cincinnati, HARRIS RILEY JR, Oklahoma City, Okla, and JOSEPH LAPIN, New York

Space 508

Treatment of Constipation in Infants and Children
EMANUEL DUBOW, Beekman Downtown Hospital, New York

Space 509
Manifestations of Muscular Dystrophy
ADE T MILHORAT, Muscular Dystrophy Association of America, Inc, New York

Space 510
Respiratory Virus in Children Coughs, Colds, and Croup
ROBERT H PARROTT, Virus Section, Research Foundation of Children's Hospital, and Laboratory of Infectious Diseases, National Institutes of Health Washington, D C

MISCELLANEOUS SUBJECTS

Space 511
Publications on Medical Service
GEORGE W COOLEY and HOWARD O BROWER, Council on Medical Service, American Medical Association, Chicago

Space 512
Safety Materials
PHILIP DYKSTRA National Safety Council, Chicago

Space 513
Medical Education Programs and Applied Research Studies
EUGENE P CAMPBELL, International Cooperation Administration, Washington, D C

Space 514
Tobacco-Health Research Program
ROBERT C HOCKETT, Tobacco Industry Research Committee, New York

Space 515
Physician-Interest in Education at High School Level
HAROLD SWANBERG, Society for Academic Achievement, Quincy, Ill

Space 516
A Career in Medicine and Medical Career Materials
WALTER S WIGGINS, Department of Medical Education and Hospitals, American Medical Association Chicago

Space 517
Selected Clinical Studies of the National Institutes of Health
C K HIMMELSBACH National Institutes of Health, Bethesda, Md

Space 518
Experiences with the Artificial Kidney
GEORGE E SCHREINER and JOHN F MAHER, Georgetown University School of Medicine, Washington, D C

Space 519
Resuscitation—A National Challenge
RICHARD J WARD, U S Air Force Medical Service, Lackland Air Force Base, Texas

Space 520
Prevention of Protein Malnutrition with Incaparina
NEVIN S SCRIMSHAW and MOISES BEHAR, Institution of Nutrition of Central America and Panama, Guatemala City, Guatemala, Central America

Space 521
Multivitamin Supplementation
PHILIP L WHITE, OGDEN C JOHNSON, and MARY JANE KIBLER, Council on Foods and Nutrition, American Medical Association, Chicago

Space 522
Overweight Its Significance and Prevention
WILLIAM P SHEPARD, GEORGE M WHEATLEY, EDWARD A LEW, and HERBERT H MARKS, Metropolitan Life Insurance Company, New York

Space 523
Control of Obesity Clinical Experiences with a New Appetite Modifier
F P RHOADES, Detroit

Space 524
Progressive Patient Care
EDWARD T THOMPSON, MIRIAM L NEFF, and DONALD A KNOWLES, U S Public Health Service, Washington, D C

Space 525
Rehabilitation of the Long-Term Chronic Patient in The Veterans Administration
A B C KNUDSON and F J SCHAFFER, Veterans Administration, Washington, D C

Space 526
Total Body Irradiation, Human Iron Metabolism, and Bone Marrow and Peripheral Blood Effects
JACK LEVIN, KIRKLAND C BRACE, and J ROBERT ANDREWS, Radiation Branch, National Cancer Institute, National Institutes of Health, Bethesda, Md

Space 527
Urologator in Bladder Irrigation and Drainage
VICTOR C LAUGHLIN Huron Road Hospital, Cleveland

Space 528
Motor Vehicles Major Source of Air Pollution
THOMAS F WILLIAMS, Air Pollution Program, Public Health Service, U S Department of Health, Education and Welfare, Washington, D C

Space 530
Progress in Orthotics and Prosthetics
HOWARD THRANHARDT, LEROY WILLIAM NATTRESS JR and LESTER A SMITH, American Board for Certification in Orthotics and Prosthetics, Washington, D C

Space 531

Protective Head Gear in Athletics

W D PAUL and DOYLE ALLSUP, Departments of Rehabilitation and Athletics, State University of Iowa, Iowa City

SURGERY

Space 601

Acute Mechanical Intestinal Obstruction

HENRY H BALCH, NATIVIDAD FLORES, FRANCISCO CARDENAS, and JAMES EGLIN, Georgetown University Surgical Division, District of Columbia General Hospital, Washington, D C

Space 602

Extracorporeal Perfusion and Thermoregulation for Open Heart Surgery

L HENRY EDMUNDS JR, and M JUDAH FOLKMAN, Naval Medical Research Institute, Bethesda, Md

Space 603

The Clinical Effect of Buccally Given Proteases Following Anorectal Surgery

JACK D SELZER and ROBERT T MCCARTY, Cincinnati

Space 604

An Apparatus for Regional Kidney Hypothermia

ABRAHAM T COCKETT, University of California Medical Center, Los Angeles

Space 605

Closure of Skin Incisions Without Sutures

THEODORE GOLDEN, ALBERT H LEVY, and WILLIAM T O'CONNOR, Veterans Administration Hospital, East Orange, N J

Space 606

Exposure Method of Skin Grafting

HERBERT D GULLICK, Veterans Administration Hospital and State University of New York Upstate Medical Center, Syracuse, N Y

Space 607

An Inexpensive Simple Lightweight Heart-Lung Machine

SAM I LERMAN, Detroit

Space 608

Pancreatography

J N BHAYANA and L BLOCK, Georgetown University Hospital, Washington, D C

Space 609

Isolated Organ Perfusion

ROBERT K AUSMAN and J BRADLEY AUST, University of Minnesota Medical School, Minneapolis

NEUROLOGY AND PSYCHIATRY

Space 610

Emotional Problems of Geriatric Patients in Institutions and General Practice

EDWARD A KENT, Brooklyn Hebrew Home and Hospital for the Aged, Brooklyn, N Y

Space 611

Psychological Care of the Chronically Ill

HARRY N CARLTON and JEANNE C BATEMAN, Washington, D C

Space 612

Psychopharmacological Treatment for Anxiety

N D C LEWIS, JOSEPH M TOBIN, and M PLANTE, Bureau of Research in Neurology and Psychiatry, Princeton, N J

Space 613

Alcoholism Is Your Business

MARVIN A BLOCK, Committee on Alcoholism, American Medical Association, Chicago

Space 614

The Expanding Frontiers of Parkinson Therapy

LEWIS J DOSHAY, Columbia-Presbyterian Medical Center, New York

Space 615

Stimulants for the Hyperactive Child?

GEORGE J LAYTON and MAURICIO KNOBLL, Kansas City, Mo

Space 616

Psychopharmacology Two Studies in a Mental Hospital Setting

ANTHONY HORDERN and JOHN G LOFIT, National Institute of Mental Health and Saint Elizabeths Hospital, Washington, D C

Space 617

Acetazolamide A Critical Review of 178 Cases

DORA CHAO and RICHARD PLUMB, The Blue Bird Circle Children's Clinic for Neurological Disorders, The Methodist Hospital, and Baylor University College of Medicine, Houston, Texas

Space 619

Emotions and Symptoms

HARRY E BANCHART, Germantown Hospital, Philadelphia and STEPHEN J DEICHELMANN, Dufur Hospital, Ambler, Pa

Space 621

Early Hospitalization for Emotional Problems in Medical Practice

MARY V MCINDOO, JAMES A RYAN, and A I MILLER, District of Columbia General Hospital, Washington, D C

Space 623

Severe Agitation Treatment with Chlordiazepoxide, a New Psychosedative

JOHN D SCHULTZ and HOWARD E TICKTIN, District of Columbia General Hospital, Washington, D C

Space 625

Tranquilizers, Barbiturates, and the Brain

HAROLD E HIMWICH, Galesburg State Research Hospital, Galesburg, Ill

WOMAN'S AUXILIARY

THE WOMAN'S AUXILIARY of the Medical Society of the District of Columbia will be hosts to the wives of physicians attending the Clinical Session of the American Medical Association in Washington, D C, Nov 28 to Dec 1, 1960

Headquarters for the Woman's Auxiliary will be at the Sheraton Park Hotel, where members of the District of Columbia Auxiliary will be on hand to greet all physicians' wives There will be a hospitality room at headquarters and coffee and tea will be served Headquarters will be open Monday, November 28, and Tuesday, November 29, 10 A M to 4 P M

Among the events planned are

- Monday, Nov 28, or Wednesday, Nov 30 (definite announcement at headquarters)
  Tour of the National Gallery of Arts
- Tuesday, Nov 29
  Tour of Washington, the Capital, Lincoln s Memorial and Mt Vernon with a stop for luncheon at the famous Hogate s Restaurant in the Potomac River area, 9 A M to 4 P M

Tickets $10 00 including tax and admissions charges Minimum of twenty-five required for this trip Advance reservations will be appreciated Please send to Mrs J Peter Murphy, 5300 Boxwood Court, Westmoreland Hills, Washington 16, D C

Tickets and information will be available at the Auxiliary headquarters at Sheraton Park Hotel and at A M A headquarters at National Guard Armory

Local Committee

Mrs J Peter Murphy, President, Woman s Auxiliary, Dist Col

Mrs J Blaine Harrell, Chairman

Mrs Jack Kleh

Mrs Francis J Murray

Mrs Francis J O Bryan

Mrs Brooks G Brown

Mrs William Oldham

Mrs Duane C Richtmeyer

Headquarters hotel for Woman s Auxiliary

116 Industrial Exhibitors

14th A.M.A. Clinical Meeting Nov. 28–Dec. 1, 1960
Washington, D. C., National Guard Armory

You'll find the Industrial Exhibits at Washington, D C, a cross-section of achievements in pharmaceuticals, medical equipment and scientific research

Exhibitors are presenting to the doctors attending an unequalled opportunity to view new ideas and new methods in all phases of practice as well as review developments on existing products

The time you spend at each booth will be more than repaid by the valuable information you will receive, and trained personnel from each company will be available to answer your technical questions

From Monday through Wednesday the Industrial Exhibits will be open each day from 8 30 A M to 5 30 P M, and on Thursday from 8 30 A M, until 12 00 noon

You'll benefit by viewing this panorama of achievements in medicine and scientific research Plan to attend the entire program in Washington, D C, this year

Industrial Exhibitors

Washington, D C Clinical Meeting
Nov 28-Dec 1, 1960
American Medical Association

	Booth Numbers
Abbott Laboratories	A-23, 25
Adolph's, Ltd	D 32, 34
American Collectors Association	G-5
American Medical Association Publications	F-1, 2
Ames Company, Inc	A-29
Arnar-Stone Laboratories, Inc	E-4
Audio Digest Foundation	F-33
Ayerst Laboratories	C-3
Baxter Laboratories	E-16, 18
Blakiston Division, McGraw-Hill Book Co	F-30
Borcherdt Company	E-25
Brewer & Company, Inc	E-38
Bristol Laboratories, Inc	E-11
Bruning, Charles, Company, Inc	F-42
Burdick Corporation, The	B-35
Burns Cuboid Company	G-10
Burroughs Wellcome & Co (U S A) Inc	B-6
Burton, Parsons & Company	F-23
Cameron Surgical Instruments Co	F-19
Christian Medical Society	E-40
Ciba Pharmaceutical Products, Inc	B-8, 10, 12, C-7, 9, 11
Coca Cola Company, The	A-5
Coreco Research Corporation	E-39
Dalzo, Inc	F-35
Davies, Rose & Company, Ltd	B-37
Desitin Chemical Company	F-21
Devereux Schools	E-36
Doho Chemical Corporation	C-36
Dynamics Corporation of America	F-39
Eaton Laboratories	A-31, 33
Fleet, C B, Co, Inc	E-29
Flint Eaton & Company	E-20, 22
Florida Citrus Commission	E-30, F-29
Fougera, E, & Company, Inc	E-26
Geigy Pharmaceuticals, Division of Geigy Chemical Corp	C-6, 8
General Foods Corporation	A-17
Great Books of the Western World	F-41
Grune & Stratton, Inc	A-7
Health Insurance Council	F-22
Holland-Rantos Co, Inc	F-7
Johnson & Johnson	D-38
Keeler Optical Products, Inc	G-7
Kellogg Company	E-34
Knoll Pharmaceutical Company	G-1
Lea & Febiger	D-26
Lederle Laboratories Division American Cyanamid Company	A-32, 34, B-31, 33
Leeming, Thos, & Co, Inc	A-36
Lippincott, J B, Co	F-9, 11
Lloyd Brothers, Inc	A-27
Loma Linda Food Company	E-23
Macmillan Company, The	E-24
Mahon, Thomas J, Inc	E-33
McNeil Laboratories, Inc	B-15, 19
Mead Johnson & Company	C-30, 32, 34
Medco Products Company	E-42
Merck Sharp & Dohme, Division of Merck & Co, Inc	B-16, 20, 22, C-15, 19, 21
Merrell, Wm S, Company, The	B-1, 2
Merrill Lynch, Pierce, Fenner & Smith	G-9
Miles Reproducer Co, Inc	E-31
Milex Products	E-41
Miller Surgical Company	E-35
Minnesota Mining & Manufacturing Company	B-38, C-37
Mutual of Omaha—United of Omaha	G-12
National Cash Register Company, The	D-31, 33
Organon, Inc	F-5
Ortho Pharmaceutical Corporation	F-15, 17
Parke Davis and Company	C-10, 12
Pepsi Cola Company	F-16, 18
Perl, Helen, Company	F-37
Personal Products Corporation	E-37
Pfizer Laboratories	C-16, 20, 22, 24, 26, D-19, 21, 23 25
Pharmacia Laboratories, Inc	D-36
Plough, Inc	C-2
Povthress, Wm P, and Company, Inc	F-36
Prior, W F, Company, Inc	D-42
Procter & Gamble Company	E-9
Purdue Frederick Company, The	A-9, B-21
Pyramid Rubber Company, The	F-20
Quaker Oats Company, The	F-28
Riker Laboratories, Inc	D 6
Ritter Company, Inc	F-6, 8
Robins, A H, Company, Inc	E-10, 12
Roche Laboratories, Div of Hoffmann-LaRoche Inc	D-2, E-1, E-3
Rorer, William H, Inc	C-1
Ross Laboratories	F-26
Sanborn Company	D-29
Sandoz Pharmaceuticals	E-21
Saunders, W B, Company	B 32, 34
Schering Corporation	D 8, 10
Schmid, Julius, Inc	D-30
Scholl Mfg Co, Inc, The	F-24
Searle, G D, and Company	D 5, 7, 9
Seven-Up Company, The	E-5, 7
Sigma Press of Medical & Technical Summaries, Inc, The	F-38
Simmons Company	F-10, 12
Smith-Dorsey, Division of Wander Company	A-15
Smith, Kline and French Laboratories	A-11, E-6
Squibb, E R & Sons	D-20, 22, 24
Strasenburgh, R J, Company	A-19, 21
Stuart Company, The	A-38
Swift & Company	F-25
Syntex Chemical Co, Inc	G-11
U S Vitamin & Pharmaceutical Corporation	C-31, 33
Walgreen Company	C-38, 39
Wallace Laboratories	A-16, 20, 22
Walton Laboratories, Inc	F-32, 34
Wampole Laboratories	E-8
Warner-Chilcott Laboratories	C-35
Westwood Pharmaceuticals	D-1
White Laboratories, Inc	C-5
Winthrop Laboratories	E-15
World Medical Association, The	F-40
Wyeth Laboratories	A-6, 8, 10, 12, B-5, 7, 9, 11
Young, F E, & Company	D-40
Zimmer Manufacturing Company	D 35

DEPARTMENT OF ECONOMIC RESEARCH

'Ensuring Medical Care for the Aged'

Reviewed by Leonard W Martin, Ph D

The purpose of "Ensuring Medical Care for the Aged"[1] is "to give an integrated and comprehensive picture of the essential findings" from reports in scientific and professional journals as well as discussions in meetings and conferences dealing with the provision and financing of medical care for the aged (p vi) Mr Spiegelman has collected and assimilated a vast amount of diverse and fugitive material and has integrated it successfully with interpretation in a highly coherent and well-organized volume Since many sources have been consulted, the book also serves as a comprehensive bibliography of materials in this area Moreover, the author as a statistician, is acutely aware of the various merits, qualifications, and limitations the data may possess

This book contains 80 carefully prepared tables Some combine several tables from one source, as table 2 11 (p 29) which relates aged couples and individuals—distributed by annual receipts—to living arrangements (with relatives) and net value of total assets The data are for 1950 and the situation today is much improved Although one-fourth of the unmarried females reported no receipts, 84% of this group lived with relatives and 34% had net assets of $3,000 or more Some tables are derived from several sources, enabling the reader to make comparisons where the data are often based on small samples or vary slightly in content The author usually presents the experience for those of all ages as well as for those 65 or over thereby providing perspective

The data are employed and interpreted with much care Census reports and field surveys, "generally produce underestimates of the amounts of income and of the number of income recipients," Spiegelman quotes from another authority (p 19) The section entitled, "Limitations of Sickness Surveys" (p 45) is one of the book's highlights With respect to chronic conditions, acute conditions, and disability, the author states (p 48), "no consensus has been reached on the definition of any of these terms" The paucity of the data and their limitations induce the author, in his interpretation, frequently to use the auxiliary verb "may" He notes (p 63) the practical nonexistence of data on the aged's dental needs and the even more fragmentary status of data on the aged's utilization of medical care services than on their morbidity (p 91)

Among the leading findings are the following Studies amply demonstrate (p 9) "the lasting devotion of children for their parents" Thus the aged have family and pecuniary resources beyond the oft-cited money income factor Acute conditions have a lower incidence, and chronic conditions a higher incidence among the aged than among younger persons (pp 50-51) There appears to be relatively greater use of hospital and physician services by the aged than by the entire population (pp 96 and 125) By 1956 continuation into retirement of group coverage for hospital and surgical insurance was available for one-third of those in New York (about three-tenths in the nation) who had it in active years (pp 177, 178), and more than 20% under group benefits had the right to convert to individual coverage (p 180) Both developments have accelerated in recent years All health insurance coverage has enjoyed growth, more rapid for the aged than for the entire population in the last six to eight years (p 213)

A survey of attitudes toward financing of health services, the author reports (p 155), claimed that if faced suddenly with a $500 medical bill, 27% of the aged "just couldn't pay" and 29% would find it "very difficult" But the author through a footnote refers the reader to his earlier report (p 31) of another survey on the aged's sources of funds available to pay a $500 medical bill In that survey, where one person might report more than one source, only 9 6% said they "could not pay such a bill" while 8 2% said they would need "public assistance or charitable aid" Mr Spiegelman, in discussing the attitude survey (pp 158, 159), should also have questioned the meaning of "can't afford to pay for health insurance Had the survey arranged the data with respect to economic resources for those who "can afford" and who "can't afford" health insurance, it would probably have revealed that some who "can afford" had smaller resources than some who "can't afford" Thus "can't afford" is subjective, indicating largely a different preference schedule from "can afford"

No work of human scholarship is without blemish In citing references the author tends to be encyclopedic rather than selective and may induce a reader to infer unintended indorsement Almost all the sources are cited as if they were equally authoritative, reliable, and scholarly One in particular comprises a catalog of common errors in the economics of medical care In an area such as this an annotated critical bibliography would be preferable In discussing the requirements for medical resources, it is noted (p 244) that the nation had a higher proportion of its 'needed" supply of tuberculosis beds in 1959 than in 1948 This results not from the growth of the population but from the progress of medical care The latter factor subjects all projections of "needed" medical resources to a qualification of unknown proportions

The concluding pages on possible future paths report statements by the proponents and opponents of a social security program for the aged's health care The proponents often express 'fear" of the failure of voluntary programs The opponents, with remarkable agreement despite variation in emphasis and wording, specify the following objections it won't help those truly in need, it involves service rather than cash benefits, it will undermine voluntary health insurance, will be inflexible, and will reduce the quality of medical care

1 Spiegelman, M Ensuring Medical Care for the Aged, Homewood, Ill Richard D Irwin, Inc, 1960

GOVERNMENT SERVICES

ARMY

Personal—Colonel Robert E Blount, Chief of the Department of Medicine, Brooke General Hospital, became a brigadier general on Sept 2 He was the only medical officer nominated last June for brigadier general's rank

PUBLIC HEALTH SERVICE

Personal—Dr Jack Masur, Assistant Surgeon General, Associate Director for NIH Clinical Care Administration, and Director of the Clinical Center, NIH, was named president-elect of the American Hospital Association He is the first government physician to attain this honor

New Clinical Center—The co-operation of physicians is requested in studies on colonic and rectal carcinoma recently initiated at the Clinical Center, National Institutes of Health, Bethesda, Md Encouraging results in the treatment of gastrointestinal carcinoma have been reported after the use of the pyrimidine analogs, 5-fluorouracil and 5 fluorodeoxyuridine, but other reports have raised the question of their effectiveness

The Chemotherapy Service of the National Cancer Institute is conducting studies of these agents in carcinoma of the colon and rectum in order to determine their place in the treatment of metastatic gastrointestinal neoplasm Because the side effects of these agents may be severe, the patients must be in good general condition in order to tolerate adequate doses Also the presence of tumor masses which can be either measured directly or demonstrated on a roentgenogram is necessary in order to assess the antitumor effect of the drugs in short trial periods

Patients can be accepted for these studies if they are ambulatory, have a normal leukocyte count and normal renal and hepatic function, and if they have metastases in the lung, peripheral lymph nodes, or skin Referrals of such patients will be greatly appreciated Physicians who wish to have their patients considered for study at the National Cancer Institute may write or call Dr Clyde O Brindley or Dr Paul P Carbone, National Cancer Institute Bethesda 14, Md (OLiver 6-400, Ext 4251)

ARMED FORCES INSTITUTE OF PATHOLOGY

Forensic Sciences Symposium—The Second Forensic Sciences Symposium, to discuss problems of mutual interest to medical, legal, and law enforcement officers in the Armed Forces, other governmental agencies, and the civilian community, will be conducted at the Armed Forces Institute of Pathology, Washington, D C, from Nov 8 to 10 The symposium will be composed of lectures, panels, and demonstrations of toxicological and other scientific methods used in criminal investigations This symposium, like the first, is designed to indoctrinate and orient hospital commanders, base and post surgeons, legal officers, military police officers, and others, along the line of forensic sciences It will also attempt to enable these personnel to know when and how to use the services of the pathologist and how better to aid and assist one another in forensic cases

Some of the topics that will be included in the three-day program are fingerprints and footprints, the role of the Armed Forces in criminal investigations, forensic pathology cases, instrumental deception detection, psychiatry and the law, rape and sex offenses, drug addiction, toxicology, firearms identification and wound ballistics, and court testimony and presentation of evidence A limited number of spaces for civilians are available, and interested civilian physicians should submit requests for attendance to the Director, Armed Forces Institute of Pathology, Washington 25, D C

was named commanding officer of the Percy Jones General Hospital in Battle Creek, Mich General Kirk took over command of the Army Medical Corps on June 1, 1943, from Major General James C Magee During the heavy fighting in Europe, he made three overseas inspections with the Secretary of War He accompanied President Truman to the Potsdam Conference in 1945 On May 31, 1947, General Kirk retired from the U S Army General Kirk was a specialist certified by the American Board of Surgery, a director of the American Foundation of Tropical Medicine, a member of the American Orthopaedic Association, American Surgical Association, Southern Surgical Association, American Academy of Orthopaedic Surgeons, U S Typhus Commission, National Committee for Mental Hygiene, Pan American Medical Association, Nu Sigma Nu, and the Association of Military Surgeons of the United States He was an honorary member of the Alpha Omega Alpha, an honorary fellow of the Southern Psychiatric Association and the American Hospital Association and a fellow and governor of the American College of Surgeons In addition to the Legion of Merit and Distinguished Service Medal, he held the honorary rank of Commander, Order of the British Empire, the French Cross Legion of Honor, and the Order of the Crown of Italy In 1944 he received the honorary doctor of science from the University of Maryland and in 1951 its outstanding alumni award He was the recipient of the honorary doctor of science from the Davidson College in 1944 and the honorary doctor of laws from Columbia University in 1947 General Kirk was the author of "Amputations' published in 1924 and a contributor to Dean Lewis' "Loose Leaf Surgery," "Nelson's Loose Leaf Surgery," "Encyclopedia of Medicine," "Surgery and Specialties,' and "Christophers Textbook of Surgery by American Authors," and wrote numerous articles on surgical subjects

Kurtz, Russell Lenoir, Nowata, Okla, Kentucky School of Medicine, Louisville, 1893, St Louis College of Physicians and Surgeons, 1893, veteran of World War I, died in the Veterans Administration Hospital in Houston, Texas, July 18, aged 89, of congestive heart failure

Kushner, J. Irving ⑪ New York City, born in New York City Feb 22, 1903, Harvard Medical School, Boston, 1929, specialist certified by the American Board of Obstetrics and Gynecology, fellow of the American Academy of Obstetrics and Gynecology, New York Academy of Medicine, and the American College of Surgeons, member of the New York Sterility Society, American Society for the Study of Sterility, Bronx Gynecological and Obstetrical Society, Alumni Society of the Bronx Hospital and the New York Academy of Sciences associated with the Beth David and Bronx hospitals, died Aug 10, aged 57, of a heart attack

Lehman, Robert Collins, Captain, U S Navy, Dayton, Ohio, University of Cincinnati College of of Medicine, 1943, interned at the Good Samaritan Hospital in Cincinnati, where he served a residency, formerly resident in surgery at the Naval Hospital in San Diego, Calif, entered the U S Navy on Sept 23, 1940, advanced to the rank of captain Jan 1, 1959, veteran of World War II, fellow of the American College of Surgeons, died in Okinawa July 25, aged 40, of acute pancreatitis

Lehmann, Walter M, Carmel, Calif, Friedrich-Wilhelms-Universitat Medizinische Fakultat, Berlin, Prussia, Germany, 1914, served as assistant in pathology at the University of Frankfurt-am-Main and as assistant professor of surgery, formerly assistant in surgery, instructor, and eventually chief of the clinic and professor of surgery, with the title of professor at the University of Goettingen, died July 20, aged 71, of coronary occlusion

Lewis, Caius Marius, Bridgeport, Ill, Physio-Medical College of Indiana, Indianapolis, 1898, served as mayor and postmaster of Bridgeport, member of the board of education, died July 26, aged 93, of carcinoma of the colon

Limbaugh, Louie Mixson, Jacksonville, Fla, born in Gainesville, Fla, Jan 9, 1893, University of Maryland School of Medicine, Baltimore, 1914, specialist certified by the American Board of Internal Medicine, veteran of World War I, fellow of the American College of Physicians, member of the American Trudeau Society, past-president of the Duval County Medical Society and the Florida Internists Society, served as vice-president of the Florida Medical Association, consultant, internal medicine, Hope Haven Hospital and Duval Medical Center, died in the Baptist Memorial Hospital July 31, aged 67, of cirrhosis of the liver

Lindsay, Wren Allie, Maud, Okla, University of Oklahoma School of Medicine, Oklahoma City 1928, also a graduate pharmacist, on the staff of the Anderson, Carson, and Hughes Hospital in Shawnee, died in the Methodist Hospital, Houston, Texas, July 14, aged 66, of ruptured abdominal aortic aneurysm

Lockett, Sidney Watson, Moosic, Pa, Temple University School of Medicine, Philadelphia, 1930, veteran of World War II, a past-president of the Taylor (Pa) Hospital medical staff, died in the Veterans Administration Hospital, Wilkes-Barre, July 23, aged 57, of coronary disease

Looney, Edward M, Salem, Mass, Baltimore Medical College, 1909, died in the New England Deaconess Hospital, Boston, Aug 2, aged 78, of acquired hemolytic anemia (etiology unknown) and generalized arteriosclerosis

McCarron, James P A, Bayonne, N J, St Louis University School of Medicine, 1934, interned at St Mary's Hospital in Hoboken and served a residency at the Columbia Hospital for Women and

Lying In Asylum, Washington, D C, fellow of the International College of Surgeons and the American College of Surgeons, a member of the medical board of Bayonne Hospital, died July 31, aged 52, of myocardial infarction

McCarthy, James Sebastian, Blue Hill, Maine, Long Island College Hospital, Brooklyn, 1922, veteran of World War II, died July 4, aged 62, of cerebral vascular accident

McCutcheon, Royal Howard, Satsuma, Fla, Jefferson Medical College of Philadelphia, 1915, member of the American College of Chest Physicians and the American Trudeau Society, past-president of the Pennsylvania Tuberculosis and Health Society and Northampton County Tuberculosis and Health Society, veteran of World War I, served on the staffs of the Allentown (Pa) State Hospital and St Luke's Hospital, formerly consultant in diseases of the chest at Bethlehem Steel Company, for many years medical director of the Pennsylvania State Sanatorium for Tuberculosis in South Mountain, Pa, died July 19, aged 69, of myocardial infarction

McGee, John William Ⓜ Aurora, Colo, University of Nebraska College of Medicine, Omaha, 1925, practiced in Omaha, where he was associated with St Catherine's, Doctors, Lutheran, and Fitzsimons General hospitals, died in St Joseph's Hospital, Omaha, July 28, aged 59, of coronary occlusion

McLarney, Thomas Joseph Ⓜ Waterbury, Conn, College of Physicians and Surgeons, Baltimore, 1897, one of the founders and served on the staff of St Mary's Hospital, died in Bristol July 27, aged 84, of myocardial infarction

Mahler, Edward, New York City, Cornell University Medical College, New York City, 1911, associated with the Mount Sinai, Beth David, and Manhattan General hospitals, died in the Lenox Hill Hospital July 25, aged 70, of coronary occlusion

Menefee, Buell Fountain, Pasadena, Calif, St Louis College of Physicians and Surgeons, 1907, veteran of World Wars I and II, retired from the Veterans Administration on June 30, 1955, formerly practiced in Jonesburg, Mo, Montgomery City, Mo, and St Louis, died in the Collis P and Howard Huntington Memorial Hospital July 29, aged 73, of coronary occlusion

Moorhead, Robert Lowry, Brooklyn, born in Brooklyn July 12, 1881, Columbia University College of Physicians and Surgeons, New York City, 1904, clinical professor emeritus of otorhinolaryngology at the State University of New York Downstate Medical Center College of Medicine, specialist certified by the American Board of Otolaryngology, member of the American Academy of Ophthalmology and Otolaryngology, American Laryngological, Rhinological and Otological Society, American Otological Society, and the American Broncho-Esophagological Association, of which he was past-president and vice-president, fellow of the American College of Surgeons, associated with the Brooklyn Eye and Ear Hospital, Norwegian Lutheran Deaconesses' Home and Hospital, Brooklyn Hospital, Long Island College Hospital, Cumberland Hospital, St Mary's Hospital, and Wyckoff Heights Hospital, died in St John's Hospital Aug 2, aged 79, of rupture of dissecting aortic aneurysm

Moss, Thomas E, Kevil, Ky, Hospital College of Medicine, Louisville, 1898, died in the Western Baptist Hospital, Paducah, July 26, aged 83, of cerebral thrombosis and hemorrhage

Naff, Mortimer Hudson, Miami Springs, Fla, Birmingham Medical College, 1912, on the staff of the Hialeah (Fla) Hospital, where he died July 22, aged 73, of pneumonia

Oliver, Howard Booth, Duck Hill, Miss, Memphis (Tenn) Hospital Medical College, 1911, veteran of World War I, for many years physician and surgeon for the Illinois Central Railroad, died July 21, aged 77, of a heart attack

Page, John Randolph Ⓜ New York City, University of Virginia School of Medicine, Charlottesville, 1899, specialist certified by the American Board of Otolaryngology, past-president of the New York Otological Society, member of the American Laryngological, Rhinological and Otological Society, and the American Otological Society, of which he was past vice-president and president, fellow of the American College of Surgeons, formerly on the faculty of New York Polyclinic Medical School and Hospital, member of the board of directors and consulting otolaryngologist at the Manhattan Eye, Ear and Throat Hospital, died July 28, aged 83

Park, John Fish, McAlester, Okla, Jefferson Medical College of Philadelphia, 1914, specialist certified by the American Board of Surgery, on the board of the Oklahoma Crippled Children's Society, fellow of the American College of Surgeons, veteran of World War I, on the courtesy staff of the McAlester General Hospital and St Mary's Hospital, where he died July 6, aged 72, of diverticulitis of the colon with hemorrhage

Pratt, John Stanford Mullin Ⓜ Coatesville, Pa, Hahnemann Medical College and Hospital of Philadelphia, 1903, for many years treasurer on the Coatesville School Board, formerly chief of staff at Coatesville Hospital, director of the National Bank of Coatesville and president of the Home Savings and Loan Association, died July 31, aged 79, of heart failure

Priest, Eda Louise, New York City, University of Oregon Medical School, Portland, 1936, interned at the Woman's Hospital of Philadelphia, served a residency at the Pennsylvania Hospital Department for Mental and Nervous Diseases in Philadelphia and the Four Winds in Katonah, N Y, member of the American Psychiatric Association, died July 26, aged 54

CORRESPONDENCE

"VIA PADUA"

To the Editor —In THE JOURNAL, March 26, page 1393, there is an interesting article about Padua I would like to correct a few mistakes that I noticed in it

About Pietro d'Abano, the author says "No Via d'Abano commemorates him " Actually, since 1933 there has been a Via Pietro d'Abano in Padua Later on, about Harvey, the writer complains that "William Harvey, the most famous man ever to have studied at the University of Padua, had been neglected by the Senatus Populusque Padovensis when they assigned street names after illustrious residents" Senatus Populusque Padovensis (sic)—let us say Patavinus—assigned in 1954 the name of William Harvey to a street, in fact, we find in "Padua Street Guide, 1958," "Via Guglielmo Harvey (D 1954) inglese, scolaro della nostra Università Scopritore della circolazione del sangue (1578-1657)"

EGIDIO MENEGHETTI, M D
Della Università Di Padova
Padua, Italy

I was delighted to receive this communication correcting my errors Wondering, however, whether "Senatus Populusque Padovensis" was the correct form, I wrote to Dr Meneghetti, who submitted the following reply —ED

As far as "Senatus Populusque Padovensis" is concerned, the Latinists of this University consider the diction incorrect The proper word is "Patavinus" (from Patavium) "Paduensis" (from Padua) could eventually be used

I appreciate your interest for Padua

Egidio Meneghetti, M D

HOMEOPATHY

To the Editor —The article on "Hormoligosis in Pharmacology," by Townsend and Luckey (*J A M A* 173 44 [May 7] 1960) discusses the Arndt-Schulz law, namely, that small drug doses stimulate and that large doses depress What disappoints me most is that the authors did not give as references any homeopathic pharmacology, because the entire method of homeopathic drug prescribing specifically follows the Arndt-Schulz law As a matter of fact, the homeopathic concept predates the Arndt-Schulz law, since Samuel Hahnemann, M D, worked out his laws of homeopathy in his book, "Organon of the Rational Art of Healing," in 1810 His principles have remained essentially the same for the past 150 years A homeopathic dose is a subphysiological dose, the smallest needed to produce the desired therapeutic effect and cure Every single "potentiated" or diluted dose, as it is called, has never caused any toxicity or dangerous side-effect in the past century and a half Hormoligosis in pharmacology ought to seriously consider the homeopathic drugs and therapeutics The Arndt-Schulz law is part and parcel of homeopathy

NAT KANNER, M D
929 Marcy Avenue
Brooklyn 16, New York

The above comments were referred to the author of the contribution cited, and he has submitted the following reply —ED

To the Editor —Dr Nat Kanner's disappointment is justified We purposely left out reference to homeopathy because we do not feel that we could give a justifiable discussion of it in relation to experimental pharmacology Hahnemann's work is one of the guides in this field, and has been briefly discussed in reference no 7 (Antibiotics, Their Chemistry and Nonmedical Uses, edited by H S Goldberg, New York, D Van Nostrand Co, Inc, 1959, p 222) of the article on "Hormoligosis in Pharmacology"

Homeopathy and Dr S Hahnemann's doctrine are apparently both based on the Paracelsian doctrine, *similia similibus curantur*, and I suspect that the idea was not really original with Paracelsus

I have difficulty interpreting Hahnemann's work Some of his dilutions were astronomical (1×10^{21}) and many of his results were evaluated subjectively If Dr Kanner could draw a line for me between the psychosomatic results of Hahnemann and those results due to administration of the drug alone, our discussion could begin with a definite starting point Without this line of demarcation and without controls being given, I am afraid that any discussion would give more heat than light

More information is needed regarding the mechanism of action of minute quantities of toxic compounds Most people recognize the effect Our work is an attempt to increase understanding and stimulate work in this field by suggesting certain generalizations

T D LUCKEY, Ph D
Professor of Biochemistry
University of Missouri
Medical Center
Columbia, Mo

ABSTRACTS FROM THE LITERATURE

Archives of Dermatology

82 487-635 (Oct) 1960

Osler s Contributions to Dermatology
T J Sullivan p 487
*Clinical Evaluation of Nicotinate Rubefacients
J B Peterson E M Farber and G P Fulton p 495
*Dihydroxyacetone (DHA) Keratin Coloring Agent
S Blau N B Kanof and L Simonson p 501
*Dihydroxyacetone A Suntan Simulating Agent
H I Maibach and A M Kligman p 505
*Photodynamic Properties of a Particular Hematoporphyrin Derivative—R L Lipson and E J Baldes p 508
*Photosensivity and Heat
R. L. Lipson and E J Baldes p 517
*Medical Specialism and the Boards
M R Caro p 521
Cutaneous Manifestations in Polyarteritis (Periarteritis) Nodosa—J C. Belisario p 526
Trimeprazine Agranulocytosis
W E Clendenning M A Kress and E W Rauschkolb p 533
*Necrobiosis Lipoidica Granulomatosis
T G Rollins and R K Winkelmann p 537
Radiodermatitis and Cancer
C W Finnerud p 544
Eccrine Poroma Associated with Bowen s Disease
T W Darnell and C Mopper p 548
Dermatologist Excoriates Bits of World Literature and Even Smaller Bits of Music—L Goldman p 551
Progressive Fatal Cutaneous Gangrene Associated with Hypogammaglobulinemia—D C Abele and others p 565
Unusual Occurrence of Sporotrichosis
H D Garrett and J B Robbins p 570
Erythema and Tumor Formation in Methoxsalen-Treated Mice Exposed to Fluorescent Light—R E Hakim and others p 572
Dermal Changes Following Application of Chemical Cauterants to Aging Skin—S Ayres III p 578
*Histopathology of Erythema Toxicum Neonatorum
R G Freeman R Spiller and J M Knox p 586
*Hydroa Aestivale in Identical Twins
C E Wheeler E P Cawley and C W Whitmore p 590
*Exopeptidases of the Human Skin
J Hasegawa p 595
Coccidioidal Granulomas of Skin and Conjunctiva Treated with Intravenous Amphotericin B—G B Skipworth and others p 605
Contribution to Bloom s Syndrome
I Katzenellenbogen and Z Laron p 609
Follow Up Study of Effect of Oral Methoxsalen on Sunburn and Suntan—J D Imbre and others p 617
Askovitz Study on Paired Comparisons
A G de Wilde p 621
New Adhesive Protectant Vehicle for Oral Mucosal Disease
A H Kutscher and E V Zegarelli p 624
*Treatment of American (Mucocutaneous) Leishmaniasis with Amphotericin B—S A P Sampaio and others p 627

Nicotinate Rubefacients—The newer nicotinate rubefacient ester rubefacients were applied to affected skin in various cutaneous disease states It was hoped that vasodilating and blood-flow enhancing properties would be of diagnostic or therapeutic value Unless carefully employed, the nicotinate rubefacients were found to produce undesirable side-effects Proper concentrations of certain nicotinate rubefacients were found of value in preventing, relieving, or shortening vasospastic episodes in certain patients with Raynaud s disease and Raynaud s phenomenon Patients suffering from Raynaud s phenomenon secondary to acrosclerosis failed to respond with vasodilation to these agents and the vasospastic episodes were thus unaltered In these patients the scleroderma tous process had destroyed cutaneous appendages and had altered cutaneous vessels as well Selected rubefacients were of value in demonstrating the deficits in cutaneous innervation produced by certain disease states, tuberculoid leprosy in particular

A Keratin Coloring Agent—Dihydroxyacetone (DHA), an intermediate in the metabolism of carbohydrates, combines with protein to give a brown color Applied to the skin, this coloration has been used to partially conceal vitiligo and other dermatologic blemishes Patch tests with DHA and use-tests over a 30-day period in a limited series gave negative results, there was no cross reaction with paraphenylenediamine in 12 known paraphenylenediamine-sensitive persons Histologic studies showed no inflammatory reaction of the skin in 2 subjects who applied DHA daily for 30 days and also that the chemical did not screen out ultraviolet radiation

Suntan Simulating Agent—A recent cosmetic development indicates the possibility of acquiring a suntan without exposure to the sun Dihydroxyacetone, the active agent in these suntan simulating proprietaries, is a triose sugar, which is an intermediate in the metabolism of carbohydrates in higher plants and animals Dihydroxyacetone is a colorless substance which was found to combine with some mainly water-soluble component on or near the surface of the skin to bring about a brownish discoloration of the horny layer This is a chemical staining reaction which does not involve any normal physiologic activity of the skin as synthesis of melanin, enzymic reactions, or microbial action Some vitiligo patients found it a useful concealing agent It did not act as a sun screen nor were sensitization or toxicity noted

Photodynamic Properties of a Hematoporphyrin Derivative—The factors involved in a photosensitivity reaction were studied by means of a photosensitivity test system that gave reproducible results and allowed the study of different variables affecting the photodynamic process in white mice The photosensitizer was an acetic acid–sulfuric acid derivative of the commercial hematoporphyrin which has been found to be a variable mixture of many porphyrins First, the general process was described and then the different factors affecting it These were (1) the dosage of the sensitizer, (2) the interval of time required for photosensitization, (3) the intensity of the light, (4) the duration of radiation exposure, and (5) the duration of photosensitization The photodynamic process was not modified by any of the drugs that were tried or by absence of the greatest absorbed and activating wavelengths from the incident radiation

Photosensitivity and Heat—A study was made to investigate the influence of heat on photosensitivity reactions Photosensitized mice were exposed to sublethal amounts of light and heat in varying combinations and sequences It was found that a normally harmless amount of heat became lethal when it followed a sublethal photodynamic action Also light and heat had an additive effect in the production of skin lesions in

Periodicals on file in the Library of the American Medical Association may be borrowed by members of the Association or its student organization Requests for periodicals should be addressed Library American Medical Association Periodical files cover 1956 to date for English language and 1958 to date for foreign language journals No charge is made to members but the fee for others is 15 cents in stamps for each item Periodicals must not be kept longer than five days Periodicals published by the American Medical Association are not available for lending but can be supplied on purchase order Reprints as a rule are the property of authors and can be obtained for permanent possession only from them

Titles marked with an asterisk (*) are abstracted

photosensitized animals The order had to be that of photodynamic action followed by heat and not the reverse, for heat did not sensitize the animals to a photodynamic insult The duration of sensitivity to heat lasted 12 hours, after which the additive effects of light followed by heat were not demonstrable Cautioning photosensitive patients against minor heat exposures might prevent skin lesions

Medical Specialism and the Boards —The author reports his personal conclusions reached after in experience of 9 years on the American Board of Dermatology, including service on the Residency Review Committee for Dermatology and the Advisory Board for Medical Specialties He discusses the role of specialism in medicine, the impact of the Specialty Boards upon training programs and candidates, and the status of the Advisory Board for Medical Specialties Specialism in medicine is here to stay A Specialty Board is not a licensing body, and it has no authority to limit the practice of any physician The Advisory Board should direct its efforts toward the delineation of medical specialties, but it should at the same time emphasize that a Board Certificate is merely a diploma issued for demonstrated qualifications and is not a license granted for a monopoly in practice

Necrobiosis Lipoidica Granulomatosis —Eighty-nine cases diagnosed at the Mayo Clinic as necrobiosis lipoidica diabeticorum in over a 20-year period were studied Clinically, there is a complete identity in the diabetic and nondiabetic patient In the nondiabetic group, 93 per cent were females and the average age of onset was 38 years, in the diabetic patients, 57 per cent were females and the average age of onset was 28 years Histologically, the findings in diabetics and nondiabetics were markedly different In the nondiabetic the histology correlated with the epithelioid granuloma response that has been termed Miescher's granulomatosis disciformis chronica et progressiva The histology of the process in diabetic patients correlated with prior descriptions of necrobiosis All 29 patients diagnosed as nondiabetics had normal concentrations of sugar in the urine and blood, and diabetes has not been known to develop in any of them subsequent to their examinations here It is our suggestion that this clinical entity in the nondiabetic be called necrobiosis lipoidica granulomatosis which suggests a similar clinical state, but the different pathologic picture

Histopathology of Erythema Toxicum Neonatorum —Erythema toxicum neonatorum is a common condition occurring in infants about the 3rd day of life as a transient macular, papular, or pustular eruption Various types of lesions were biopsied and a histopathologic study of biopsies from 10 cases revealed edema in the upper dermis, a diffuse infiltration of eosinophils, and in some cases subcorneal or intraepidermal pustules containing eosinophils The papular and pustular reactions appeared to be related to the upper part of the pilosebaceous structure in most cases

Hydroa Aestivale in Identical Twins —Hydroa aestivale, characterized by a papulovesicular eruption, pigmentary changes, and scarring on the exposed skin surfaces, was reported in 12-year-old, white, identical male twins Porphyria, one of the causes of the symptom complex of hydroa aestivale, seemed unlikely in view of negative tests for abnormal porphyrins in the urine of the twins and their parents Hydroa aestivale might have numerous causes, including porphyria and hereditary factors

Exopeptidases of the Human Skin —In a study of 26 cutaneous biopsy specimens from 11 patients with various dermatologic conditions it was found that alanylglycine dipeptidase and leucylglycylglycine tripeptidase could be found in measurable quantities in the epidermis and dermal infiltrate, and that the collagenous tissue contained relatively little of these enzymes A usable value for alanylglycine dipeptidase and leucylglycylglycine tripeptidase could be determined by correlating the histological volume measurements with the biochemical determinations of the enzyme content in 10 μ sections For alanylglycine dipeptidase the value was 34 9 ± 4 9 cu mm N/10 HCl per cu mm epidermal-equivalent per hour For leucylglycylglycine tripeptidase the value was 23 1 ± 3 9 cu mm N/10 HCl per cubic mm epidermal-equivalent per hour

American Leishmaniasis and Amphotericin B —American leishmaniasis continues as a serious problem Despite intensive therapy some forms develop resistance, and relapses are often encountered Impressive therapeutic results are being obtained with amphotericin B Of a total of 20 patients treated, 15 had the disease from 2 to 33 years and had previously received arsenical and/or antimonial therapy The remaining 5 patients had received no previous treatment and had experienced the disease for from 45 days to 1 year Complete healing was effected in 19 patients the total dose of amphotericin B ranged from 725 [illegible] 1 850 mg administered intravenously over a per[illegible] 32 to 77 days The remaining patient, with [illegible] lesion of 20 years duration, responded to loca[illegible] B, following a course of in[illegible] One [illegible]nt had a relapse but promp[illegible] [illegible]l course of amphotericin B

resulting profound sensory loss Thirteen of the 14 patients with primary head and neck pain had some relief after thalamotomy The destruction of thalamic structures, other than sensory relay nuclei, was suggested as a possible cause of pain relief since some of these patients had minimal sensory loss with complete relief of pain This procedure is especially applicable to patients with cancer of the head and neck and chronic severe pain, since the duration of pain relief afforded by the procedure falls into the life expectancy range of these patients Emotional or personality changes are minimal or absent when ventral posterior thalamus lesions are produced with a chronic implantation technique In addition disabling loss of sensation has not occurred in the group with chronic cranio cervical pain nor has the thalamic syndrome described by Dejerine-Roussy been a serious problem The chronic implantation technique affords an unusual opportunity for physiological studies of the human thalamus

Stereotactic Thalamotomy —This paper reports a study of the results of recording stimulation and ablation of the sensory nucleus of the thalamus in 17 human subjects Electrodes were implanted stereotactically and left in place prior to fractional radio-frequency coagulation of the sensory nucleus Peripheral stimulation evoked post synaptic potentials which showed a conduction velocity of 30 to 60 m per second Such potentials in the awake patient were recorded from all extremities There was no qualitative differentiation of this activity related to stimulus modality Potentials were increased in amplitude under light Nembutal anesthesia and could be systematically modified by experimental manipulation of the patient s attention Intracerebral stimulation evoked contralateral, discretely localized paraesthesias only from those electrodes radiographically identified as being in the region of the sensory thalamus No specific sensory modality was reported by any of our patients Lesions at medial electrodes produced relief of the cancer pain with no clinically detectable sensory loss More laterally placed lesions produced profound sensory deficit in contralateral limbs, including loss of pin sensation, without alleviation of pain

Peripheral Nerve Fiber Size and Sensation —The sural nerve was exposed in 11 human patients With oscillographic recording as a control, the action potential was divided by varying stimulus intensities so that A-beta, A-beta-gamma, A-beta gamma-delta, and A plus C fibers were stimulated These divisions into fiber size were correlated with responses from the patients before and after cordotomy In the precordotomy patients no pain was elicited on stimulating A-beta or A-beta-gamma groups All other groups were painful when stimulated Following cordotomy all stimuli were well tolerated but with some unpleasant quality to the sensation when the smaller A-delta and C fibers were stimulated The study demonstrated that small fibers must be stimulated to produce pain from exposed peripheral nerves

Anemia and Intermittent Focal Cerebral Arterial Insufficiency —Five patients had attacks of focal cerebral ischemia during a period when hemoglobin was reduced but not when hemoglobin was normal While no experimental proof was available, these clinical experiences suggest that a relationship exists between the amount of hemoglobin and the prevention of such ischemic attacks, or conversely that anemia may be a factor of such attacks in some patients

Embolic Occlusion of a Single Leptomeningeal Artery —A single steel sphere was injected into the internal carotid artery of a series of dogs The diameter of the sphere was 800 μ, enabling it to enter a leptomeningeal artery Occlusion without infarction occurred if the sphere lodged in the artery at a point between penetrating cortical branches However, when the origin of a penetrating vessel was blocked, 2 infarcts were seen distal to the occlusion The infarct nearer the sphere in gray matter was hemorrhagic The infarct farther from the sphere in white matter was anemic Hemorrhagic infarction was explained by diapedesis from the richer blood supply of the gray matter Anemic infarction was the result of relative avascularity of white matter This experiment offers the first demonstration of the consequences of point occlusion in a leptomeningeal artery without other vascular disease or trauma

Corpus Callosum in Transfer of Tactuo Kinesthetic Learning —Until recent times the contributions of the forebrain commissures to cerebral function remained obscure Present day studies show, however, that the posterior corpus callosum transmits information between the hemispheres detailing the import of objects experienced through vision Does corpus callosum function in like manner within the touch-kinesthetic sense modality? The present study clearly indicates that it does Three normal and 2 corpus callosum-sectioned chimpanzees were taught to solve a simple latch box problem while allowed to use only the right hand On subsequent tests using the untrained left hand the normal animals immediately solved the problem while the commissuratomized animals failed completely Similar results were obtained on tests of transfer of training in the opposite direction In the absense of corpus callosum tactuo-kinesthetic experiences achieved through 1 hand are no longer available through the other hand

Loss of Sensory Level Following Bilateral Cervical Cordotomy —The failure at times to relieve pain by cervical cordotomy is not always explained by anatomical variations in the pain pathways or by surgical technique When pain has recurred many years after satisfactory cordotomy, physiological and anatomical factors are involved The postcordotomy functional integration of the temporal and spatial relationships involving various sensory stimuli is probably as important in explaining the return of pain sensation The evidence supports the presence of a polysynaptic system lying near the gray columns concerned with pain conduction The late return of pain after cordotomy implies a more complicated alternative mechanism Further investigation of the anatomico physiological factors of pain mechanisms is necessary

Astrocytes in Gliosis and Astrocytoma —The astrocytes of 7 cases of reactional gliosis and of 7 cases of astrocytoma were compared by using a Baker-Smith interference microscope with a 100 × shearing system objective The slides were mounted in 1 490 and 1 515 mounting media The following data were studied refractive index, effective thickness, and dry mass per unit area The area of the cells was determined, and the dry mass of the cells was calculated No essential differences were observed for the refractive indices effective thickness, or dry mass per unit area The cellular area and cellular dry mass were larger in the gliosis than in the astrocytoma group Parallel measurements were taken in superficial and deep cells and no essential differences were observed

had complained of monthly episodes of right lower abdominal distress After an interval of about 3 years he was operated on again, and was told that he had an intestinal obstruction due to an adhesion across the colon Treatment with the Harris tube was employed in a subsequent attack characterized by symptoms of appendicitis About 2 years later, the abdomen was explored again through the old right rectus incision A chronically inflamed appendix was found retroperitoneally The authors believe that at the first "appendectomy" in acutely inflamed cecal diverticulum or in appendix epiploica was mistaken for the appendix vermiformis In the other 7 patients the following diagnoses were made, mostly on the basis of pathologic studies (1) acute inflammation of the proximal appendiceal stump, (2) acute appendicitis in an appendiceal tip, (3) acute gangrene of a solitary diverticulum of the cecum, (4) chronic cholecystitis with cholelithiasis, cholesterolosis of the gallbladder, and chronic Meckel's diverticulitis, (5) a segmental type of ileitis, (6) acute pyelonephritis in an ectopic kidney, and (7) torsion of the omentum In this last instance the diagnosis was not established by laparotomy, but the clinical picture was highly suggestive of this entity The presence of right-sided abdominal pain without a change in bowel habits, nausea or vomiting, without fever and with a palpable mass, are all associated with omental torsion, which occurs most frequently in robust males who are exposed to abdominal trauma or strenuous physical exertion

California Medicine, San Francisco

93 1-94 (July) 1960 Partial Index

*Serum Amylase in Peptic Gastroduodenal Perforation
F A Rogers p 6
Cantharidin Treatment of Warts
J H Epstein and W L Epstein p 11
Psychic Structure and Function
E F Alston p 13
Psychotherapeutic Approach to Emotional Problems
E M Weinshel p 19
Phenothiazine Ataraxics—Extrapyramidal Reactions
H D Cain and M Malcolm p 24
Rautrax a New Antihypertensive Agent
G E Nesche p 29

Serum Amylase in Peptic Gastroduodenal Perforation—An elevated serum amylase level is a frequent concomitant of perforated gastroduodenal ulcer To determine if there might be significant correlation between an increase in amylase and some of the other factors associated with ulcer perforation, the author made a study of the clinical records of 1,000 patients with perforated ulcer who were treated at the Los Angeles County General Hospital One hundred sixty patients (16%) had amylase levels of 200 Somogyi units or more This rise in serum amylase level comes about in cases of perforated peptic ulcer as a result of peritoneal lymphatic absorption of fluid containing pancreatic enzyme which is spilled through the perforation Among patients with perforated ulcers and elevated serum amylase levels, the higher the amylase level, the higher the mortality The factors of abdominal fluid spill, the duration of the perforation before surgical closure, the size of the perforation, shock, and recent ingestion of food were also studied for possible relationship with elevated serum amylase level All appeared to be statistical if not etiological associates of abnormal serum amylase levels Because high amylase levels occur so often in the serums of patients with perforated ulcer, there is no amylase level that can be considered diagnostic of acute pancreatitis

Chinese Medical Journal, Peking

80 505-608 (June) 1960 Partial Index

Homograft Replacement of Aortic Arch
Shih Mei-hsin and others p 505
*Adenovirus and Adenoviral Infections
Luo Huei-yuan and others p 514
Blood Supply of Experimental Fractures
Yu Shu-wen p 520
*Treatment of Schistosomiasis Japonica
Hsu Jih-kuang and others p 530
Normal Excretion of Lead and Coproporphyrin
Szechuan Medical College p 538

Adenovirus and Adenoviral Infections—Three strains of adenovirus were isolated by means of HeLa cultures from a total of 69 specimens of throat washings obtained from patients of various ages with upper respiratory tract infections Two of the strains were identified as type 3 adenovirus The total percentage of positives (4 3%) was low, lending support to the conclusion that adenoviral infection is rather uncommon among the population Type 3 adenoviral complement fixing antibody was found in the sera of only 12% of 119 patients of various ages suffering from diseases other than upper respiratory tract infections This study was made in autumn It would be worth-while to conduct a similar survey in winter when this type of infection is on the upsurge

Treatment of Schistosomiasis Japonica—Sodium antimony dimercaptosuccinate (Sb-58), a trivalent antimony preparation recently synthesized by the Academia Sinica, was given intramuscularly in a 10% aqueous solution to 567 patients with schistosomiasis japonica, 379 of these had a latent form of infection, while 188 had advanced schistosomiasis The same toxic reactions were noted as those induced by tartar emetic therapy Tissue irritation was insignificant The absorption of Sb-58 through the intramuscular route seemed to be satisfactory, and it gave a higher level of antimony in the blood for a longer period than tartar emetic Of this series, 345 patients were given a 3-day treatment with a total dose ranging from 30 to 40 mg per kilogram of body weight, and 222 were given a 12-day treatment with a total dose varying between 40 and 60 mg per kilogram of body weight The treatment had to be stopped in 21 patients of the latter group because of untoward reactions, 3 died as a result of intolerance, and 1 died following massive hemorrhage from esophageal varices The short- and long-range therapeutic results of the 3-day treatment were 64 1% and 59 9% respectively, and those of the 12-day treatment were 77 8% and 64 5% respectively It was found that the patients' symptoms, anemic state, and disturbances of the liver showed improvement, and that their working capacity was increased by the Sb-58 therapy

Hospital, Rio de Janeiro

57 920-1148 (June) 1960 Partial Index

*Anabolic Effects of Steroids in Geriatrics
G Avena p 969
Electroencephalography in Hereditary and Congenital Dermatoses—J D Azulay p 1035
Neuronal Destruction of Peripheral Nervous System in Chagas Disease—F Koberle and F G de Alcantara p 1057
Identification of Urine and Feces Porphyrin in Hepatic Porphyria—R P de Mello and I Ballini p 1063

Anabolic Effects of Steroids in Geriatrics—Twenty patients with arteriosclerosis (17 men and 3 women whose

ages ranged from 60 to 80 years) were treated for heart disease for periods of 45 to 75 days These patients also suffered from psychic, nervous, or sexual disorders, and from digestive and urinary disturbances The treatment consisted of an initial dose of 10 to 20 mg of 4-chlorotestosterone every other day, after 2 weeks this was increased to 30 mg daily and 2 weeks later was reduced to 20 mg The best results were obtained in the subjective symptoms, with normalization of cardiac rhythm, weight gain, increase in muscular strength, disappearance of anorexia, regression of amnesia, asthenia, and insomnia Patients with osteoporosis and arthralgia also improved In the objective symptoms there was normalization of blood dyscrasia, increase in diuresis, and improvement in the blood levels of potassium, nitrogen, and creatine and in the total proteins, together with a decrease in globulins Side effects were few and mild The dosage had to be reduced from 30 to 20 mg in 4 patients because of tachycardia in 1, nervous excitement in 2 and insomnia in 1, but no interruption of the therapy was necessary The author believes that the therapeutic use of 4-chlorotestosterone has a wide range of possibilities in geriatrics including preoperative and postoperative medication and treatment of inoperable neoplasm

Journal of Immunology, Baltimore

85 1-106 (July) 1960 Partial Index

Cellular Mechanisms in Resistance to Systemic Histoplasma Capsulatum Infection—G A Hill and S Marcus p 6
Experimental Production of Antinuclear Antibodies P Miescher N S Cooper and B Benacerraf p 27
Immunochemical Studies of Human Serum RH Agglutinins P C Y Chan and H F Deutsch p 37
*Transfer of Poliovantibody from Mother to Fetus Disappearance in Infant—H M Gelfand and others p 46
Behavior of Different Strains of Poliomyelitis Virus in Complement Fixation—N J Schmidt and others p 67
Physical Properties of Emulsified Influenza Virus Vaccines and Adjuvant Response—B S Berlin p 81
Serologic Reactivity to Bordetella (Pertussis Group) Antigen in Various Hosts—A L Terzin p 90

Poliovantibody in Mother and Fetus—During an investigation into the process of natural infection with poliovirus in young children in Louisiana babies were born into families included in this longitudinal study Since the mothers had been under observation and the infants were immediately placed under serologic and virologic surveillance an opportunity was provided for the accumulation of comparative data on the antibody levels in maternal umbilical cord, and infants serums During 1953 and until the end of 1957, families were under observation from the time of or shortly after the birth of a baby A blood specimen was collected from each mother at least once a year At the birth of a baby an umbilical cord blood specimen was obtained A blood specimen and a sample of feces were collected from each infant at monthly intervals The 66 pairs of serums available for study each pair representing a mother and the umbilical cord blood of her infant, came from only 49 different women, since in 15 instances 2 babies were born of the same mother and in 1 instance 3 babies (all separate pregnancies) All of the 66 maternal serums possessed type 1 poliovirus neutralizing antibody but specimens 1 and 9 lacked antibodies of types 2 and 3, respectively The antibody titer varied, in general, very little within each pair of serums, but there was a greater tendency in the transfer of type 3 virus to be inefficient as compared with that of types 1 and 2 Transfer inefficiency of any antibody type may occur in individual women Since the antibodies possessed by children at birth gradually disappear, the percentage of seropositive infants becomes gradually smaller with advancing postpartum age At 3 months of age, in the highly endemic area in which this study was carried out, over 50% of the infants were seronegative at a serum dilution of 1 10 against any one type of antibody The importance of this finding to early vaccination is discussed

J Indiana State Medical Association, Indianapolis

53 1256-1424 (July) 1960 Partial Index

Early Active Motion in Joint Pain and Stiffness E B Mumford p 1303
Duck Embryo Rabies Vaccine Against Street Virus H M Powell and others p 1307
*Hereditary Hyperparathyroidism C E Jackson P C Talbert, and H D Caylor p 1313
Gelfoam in Treatment of Stasis Ulcers M M Nierman p 1317
Vaccinia Immune Globulin Used for Vaccinia of Eyelids R W Harger p 1323

Hereditary Hyperparathyroidism—The author reports on 2 families of patients with hyperparathyroidism In one family there were 6, and possibly 7, members in 2 generations with the disease In the other family there were 2, a father and son In the first family, 2 members with parathyroid adenomas had recurring attacks of pancreatitis and were relieved of the pancreatitis by excision of the parathyroid adenomas These data suggest that the pancreatitis must have been secondary to the hyperparathyroidism In the 2nd family there was a high incidence of peptic ulcer Ulcers have been reported to occur in about 15% of patients with hyperparathyroidism It has been suggested that the high incidence of ulcer in patients with hyperparathyroidism may be due to the fact that the hyperparathyroid state causes the underlying inherited ulcer tendency to be completely or almost completely manifest Case histories of seven additional families with parathyroid adenomas in several members were collected from the literature In a 3rd family reported on by the authors in an addendum a 78-year-old woman and her 16-year-old great-nephew have had parathyroid adenomas removed The observations made in the 3 families reported on by the authors and in those collected from the literature suggest that hyperparathyroidism may be inherited as an autosomal dominant condition It is felt that hereditary hyperparathyroidism is related to a condition described as hereditary adenomatosis of the endocrine glands

Journal Laboratory & Clinical Medicine, St Louis

56 1-166 (July) 1960 Partial Index

*Human Renal Transplantation H E Gunn Jr and others p 1
Effect of Prednisone on Coagulation Time in Patients on Dicumarol Therapy—J Menczel and F Dreyfuss p 14
Dihydrovitamin K1 Biphosphate in Bishydroxycoumarin Induced Hypoprothrombinemia—M Shoshkes and M Tanu p 21
Effect of Endotoxin on Intact Dog's Heart G M Maxwell and others p 38
*Anemia of Cirrhosis T W Sheehy and O H Pearson p 72

Human Renal Transplantation—A 26-year-old man with chronic glomerulonephritis was hospitalized with a blood pressure of 240/140 mm Hg a pulse rate of 110 per minute, and complaints of headache, blurred vision, and periorbital and pedal edema As the patient's condition deteriorated, and he had a twin brother in good health renal transplantation was performed after preliminary exchanges

of skin graft between the 2 brothers showed no evidence of rejection Transplantation was carried out 2 days after extracorporeal hemodialysis, with a 47-minute ischemic period of the transplanted kidney On the 21st day after the transplantation the patient's diseased kidneys were removed in a 1-stage procedure Recipient and donor were followed up for 9 months Effective renal plasma flow and glomerular filtration rate were similar in each of the twins, renal functions were within normal ranges in both It is concluded that renal nerves are not necessary for the regulation of extracellular fluid volume, and that abnormalities observed by other writers have probably been due to a longer ischemic period (an 89-minute ischemic period was reported by Bricker and co-workers), or to a longer interval between transplantation and nephrectomy of the diseased organs (5 months in Bricker's case), or both Renal nerves are actually not necessary for the regulation of extracellular volume, nor do they appear to be essential for the normal response of the kidney in the other diversified functions tested in this investigation

Anemia of Cirrhosis —The anemia of Laennec's cirrhosis was studied in 20 men and 4 women, with specific evaluation of the role of hemolysis, hypervolemia, and chronic bleeding Each patient had experienced at least 1 episode of gastrointestinal hemorrhage Twenty normal subjects and 17 patients with untreated polycythemia were used as controls for blood volume determination Ten of the 24 patients with cirrhosis had a red cell mass below the normal range, and the plasma volume was increased in 15 The red cell survival time, determined with autogenous Cr^{51}-labeled red cells, was normal in 9 patients and decreased in 15 Analysis of radioactivity of the feces indicated loss of blood into the gastrointestinal tract in 7 of the 10 cirrhotic patients who were subjected to this study Thrombocytopenia was present in 12 of the 24 patients and appeared to be associated with intermittent, unsuspected bleeding from the gastrointestinal tract The authors concluded that the anemia of cirrhosis is unusual, and that hemolysis, hemorrhage, and chronic blood loss from thrombocytopenia may all be contributing factors Even these factors do not explain all the facets, for in some patients, unable to maintain a normal red cell volume, the hemolytic process is no more severe than in others who have a normal red cell mass A modified inhibition of bone marrow production resulting from several deficiencies, as for example lack of iron, may also be a contributing factor, while hypervolemia accentuates both the incidence and the severity of low values for hemoglobin and hematocrit in Laennec's cirrhosis

J. Neuropathology & Exper Neurology, New York

19 323-474 (July) 1960 Partial Index

*Infantile Metachromatic Leukodystrophy
G A Jervis p 323
Pseudohypertrophic Muscular Dystrophy
G A Gresham and J G Cruickshank p 342
[illegible]tral Nervous System Lipidosis
[illegible] I M Fine, K D Barron and A Hirano p 355

[illegible]ntile Metachromatic Leukodystrophy —The author reports on a 5-year-old idiotic tetraplegic girl and on a 2-year-old idiotic and epileptic girl with infantile metachromatic leukodystrophy (Greenfield's disease), who were admitted for custodial care to the Letchworth Village Hospital in Thiells, N J The main clinical features included motor involvement, muscular rigidity and/or spasticity, mental deterioration, and convulsions Both patients died of bronchopneumonia and autopsy was performed in both Diffuse demyelination of the brain was the outstanding pathological feature in both patients and the distinguishing feature was an extraordinary accumulation of metachromatic material Various histochemical examinations and chemical analyses which were performed in an attempt to identify the metachromatic material, revealed accumulation of sulfatides (sulfolipids) in the demyelinated areas and, to a lesser extent, in the nerve cells and other tissues of the body The clinical, pathological, and chemical findings indicate that the disease is a well-defined clinical and pathological entity, which may be classified among the lipidoses of the central nervous system under the term "sulfatidosis" Ten additional cases of infantile metachromatic leukodystrophy in 6 girls and 4 boys, 28 to 40 months of age at the time of their deaths, were collected from the literature

Lancet, London

2 1-54 (July 2) 1960 Partial Index

*Staphylococcal Wound Infection
P Rountree and others p 1
Method of Controlled Oxygen Administration
E J M Campbell p 12
*Body-Fat in Diabetes Mellitus
A G Beckett and J G Lewis p 14

Staphylococcal Wound Infection in Surgical Unit —During 6 months, 217 consecutive surgical wounds in one department were examined for clinical and bacteriological evidence of infection In 198 clean wounds the infection rate was 14%, while in the 19 dirty wounds the cross-infection rate was 68%, 35 wounds were infected with *Staph aureus* Of 171 wounds covered with a plastic seal at the end of operation, 12 (7%) were infected In 5 of these the patient on admission was already a carrier of the organism which infected his wound In 27 wounds dressed with a gauze pad, and in 19 wounds with draining sinuses, the infection rates were 56% and 68% respectively Investigations in operating-theatres revealed little evidence of infection during operations Investigations in wards showed that patients and staff often acquired antibiotic-resistant staphylococci of phage-type 47 in their noses These strains were isolated from the ward environment and were responsible for most of the wound infections

Body-Fat In Diabetes Mellitus —Occlusive vascular disease was noted in 178 of the 1,200 patients attending a diabetic clinic In 24 of these it manifested itself during periods of weight-loss There was a clear relation in 13 patients between the onset of serious vascular disease and the period of therapeutic weight-loss Asymptomatic damage may have occurred more often During weight reduction the rate of mobilization of body-fat may be increased far more than required by the caloric demand The fat mobilized at such times is largely saturated and is often present in increased concentration in the blood With these quantitative and qualitative changes conditions may occur which may alter the blood coagulation so as to induce thrombosis or increase atheroma It is suggested in explanation of the mechanisms involved that the mobilization and utilization of saturated body-fat at a time when the intake of essential unsaturated fats is low produces a relative deficiency of such essential

fats It is recommended that in overweight diabetic patients reduction should be slow, and that during reduction the diabetes should be controlled, if necessary, by insulin or by an oral anti-diabetic substance The addition of essential unsaturated fatty acids to the diet might be of value during the initial period of weight reduction

Medical Journal of Australia, Sydney

1 913 952 (June 11) 1960 Partial Index

Developments in Serum Sensitivity Testing
J C Trinca .. p 913
•Bleeding Peptic Ulcer Treated with Minimal Blood Transfusions—W K. Manning and K O Connor p 918

Bleeding Peptic Ulcer and Minimal Blood Transfusions —An exclusive medical program was used in 500 patient with bleeding peptic ulcer which relied mainly on the natural tendency to spontaneous arrest of hemorrhage This tendency was reinforced with heavy sedation of the patients and appropriate supportive measures Blood transfusion was used sparingly and was given only for the relief of local or general anoxia Of the total series of patients 6 died from bleeding peptic ulcer but only 1 of these had no other complicating disease Mortality was closely related—not with chronological age—but with the presence of a chronic and severe coexisting disease of other organs or with a general weak condition associated with prolonged illness or senility In such patients the usual therapeutic measures are often ineffective and moderate blood loss merely precipitates death already determined by other conditions

Minerva medica, Turin

51 2337-2428 (June 27) 1960 Partial Index

•Effects of Streptomycin and Dihydrostreptomycin on Acoustic Nerve—R Bulgarelli p 2337
Biermer's Pernicious Anemia and Gastric Polyposis
I M Stoppa p 2347

Effects of Streptomycin and Dihydrostreptomycin on Acoustic Nerve —After an initial period of underestimation of the grave danger of deafness medical investigators, including the author, reached the conclusion that the use of dihydrostreptomycin, by either intraspinal or intravenous route should be banned from any treatment, of any duration It should be replaced by streptomycin in the treatment of tuberculosis or any other infectious disease Dihydrostreptomycin (as neomycin) has a special affinity for the cochlear nerve and causes deafness which is usually irreversible Streptomycin (like cycloserine, polymyxin, coly-mycin, and xamamina) has a special affinity for the vestibular nerve and causes disturbances mainly of the equilibrium most of which are reversible from the clinical point [illegible]iew and susceptible of improvement from the otolog[illegible]ndpoint The toxic effects of dihydrostreptomycin [illegible]ecially dangerous in patients whose impaired ren[illegible] pre-vents normal excretion of the drug Even [illegible]ns, of any age may become entirely deaf afte[illegible]a-tion of a few grams of dihydrostreptomycin [illegible]on with streptomycin does not reduce the tox[illegible]dro-streptomycin in relation to the cochlear [illegible]dro-streptomycin can, however, be safely adr[illegible]ly in the treatment of bacterial enteritis, for n[illegible]mycin nor dihydrostreptomycin passes into the [illegible]ficant amounts when given by oral route

New England Journal of Medicine, Boston

263 51-104 (July 14) 1960 Partial Index

•Relapsing Polychondritis
C M Pearson H M Kline and V D Newcomer p 51
Hemorrhagic Necrosis of Gastrointestinal Tract
Si Chun Ming and R Levitan p 59
•Postoperative Bacterial Endocarditis
L M Linde and H L Heins p 65
Significance of Candida Albicans in Human Sputum
G L Baum p 70
Laennec's Cirrhosis
T Rodman M Sobel and H P Close p 73

Relapsing Polychondritis —The authors report on a 33-year-old man and on a 29-year-old woman with intense inflammatory and degenerative processes, which developed in several cartilaginous structures that were eventually dissolved and replaced by fibrous connective tissue Because of the recurrent bouts of inflammation of cartilage the term relapsing polychondritis was coined for this syndrome Ten similar cases were collected from the literature Two other cases of focal chondritis with inflammation and partial collapse of the external ear in a 45-year-old woman and in a 47-year-old man have been briefly described Relapsing polychondritis is a multiple recurring disease of cartilage, in which chondrolysis causes clinical arthritis, collapse or distortion of the external ear and the cartilaginous portion of the nose, dissolution of portions of all of the cartilages of the trachea, bronchi larynx, and epiglottis as well as occasionally those of the costal cartilages and the spinal articulations Because of exuberant granulation tissue which may appear in the respiratory tract severe pulmonary symptoms (suffocation or infection) are common Corticosteroids have been very effective in controlling the clinical symptoms and the progression of the disease To control the acute disease 30 mg of prednisone was given daily in divided doses After complete control the dosage was slowly tapered to 10 to 12 5 mg per day as a maintenance medication Causation of the disease is completely unknown, but there is speculation about factors of hypersensitivity and metabolic or enzymatic aberrations Articular manifestations of relapsing polychondritis are remarkably similar to certain forms of rheumatoid arthritis which should be considered in the differential diagnosis as well as Wegener's granulomatosis Reiter's syndrome, and Cogan's syndrome

Postoperative Bacterial Endocarditis —The authors report on 7 patients, 2½ to 20 years of age, in whom the diagnosis of bacterial endocarditis was made within 3 days to 3 months after surgical intervention for congenital heart disease Of 205 patients who underwent heart-pump operations, bacterial endocarditis developed in 5 (2 4%) of 345 patients who underwent all other types of heart and great-vessel operations bacterial endocarditis occurred in only 2 (0 6%) Two of the 7 patients died despite intensive therapy, and the diagnosis was confirmed by autopsy Achromobacter organisms were the causative agents in 2 patients *Ps aeruginosa* in 1, *Staphylococcus pyogenes var aureus* in 3, and Neisseria in 1 The usual classic signs and symptoms of subacute bacterial endocarditis, or even of acute bacterial endocarditis were not striking All the patients had high fever but the size of the spleen and of the liver was not increased and petechiae, clubbing Osler's nodes, embolic phenomena, weight loss, leukocytosis and anemia were absent. Positive blood cultures were obtained in all 7 patients Altered host resistance sites of intracardiac trauma, infections with unusual bacterial strains and increased

sources of exposure resulted in a more rapidly progressing and malignant disease Awareness of the variation in endocarditis after cardiac surgical intervention is necessary for more prompt diagnosis, proper antibiotic therapy and prevention of this disease

Nordisk Medicin, Stockholm

63 673-704 (June 2) 1960 Partial Index

Medullary Sponge Kidney
T Ekstrom and others p 678
*Familial Occurrence of Acute Glomerulonephritis
Ø Skjeggestad p 683

Familial Occurrence of Acute Glomerulonephritis—The author presents observations on a family in which acute glomerulonephritis developed simultaneously in 3 of 5 siblings, whereas the other 2 had slight transient proteinuria One of the 2 had previously had acute glomerulonephritis Neighbors, schoolmates, and other contacts of these patients, who probably carried the same strain of streptococcus did not have this high incidence of acute glomerulonephritis It is possible that the familial occurrence of acute glomerulonephritis may be due to a nephrotoxic strain of streptococcus or to the fact that the family had a special predisposition to this disease

Semaine des Hôpitaux, Paris

36 1761-1832 (June 18) 1960 Partial Index

Idiopathic Mixed Jaundice with Successive Crises
A Charbonnier and others p 1781
New Case of Congenital Cystic Dilatations of Intrahepatic Biliary Tract—J Caroli J Etevé and B Emerit p 1791
*Delayed Toxicity of Chlorothiazide Therapy in Cirrhotic Ascites—G Pequignot and others p 1801

Delayed Toxicity of Chlorothiazide in Cirrhotic Ascites—Chlorothiazide tablets were given to 18 patients with cirrhotic ascites as a substitute for paracentesis Eight patients developed hyperazotemia after an interval which varied from 15 days to 5 months following a 1st treatment and from 15 days to 3 months following a last treatment The total dose administered to these 8 patients varied from 10 to 25 tablets of 0 50 Gm No relationship was observed between the severity of the complications and the dose of chlorothiazide One single treatment was enough in one patient to cause a fatal accident, although in 6 of the 8 patients who developed hyperazotemia the complication occurred only after several treatments Five of the 8 patients who developed hyperazotemia died The authors call attention to the fact that the role of the kidneys in the mechanism of the chlorothiazide side-effects is not known and that the complication may be disguised under a picture of hepatic coma It is concluded that the use of chlorothiazide and similar preparations in the treatment of cirrhotic ascites is contraindicated

Thorax, London

15 93-184 (June) 1960 Partial Index

Coronary Arteriography
K Lawrance p 93
Radiological Diagnosis of Asbestosis
R Williams and P Hugh-Jones p 103
*Lung Function Changes in Asbestosis
R Williams and P Hugh-Jones p 109
Malignant Teratoid Tumor of Lung
T Schødt and K G Jensen p 120
Positive Pressure Breathing
P E Emerson and others p 124
Measurement of Bronchial Mucous Gland Layer
L Reid p 132
Bronchial Biopsy in Bronchitis and Asthma
A A Glynn and L Michaels p 142

Lung Function Changes in Asbestosis—The authors studied the lung function in 40 patients at the Royal Free Hospital, London, who had been exposed to asbestos dust in their work for varying periods of time Of these, asbestosis had been certified by the pneumoconiosis medical boards in 21, 10 patients with a prolonged exposure did not have definite roentgenographic signs of asbestosis, in the remaining 9 patients the diagnosis of asbestosis was doubtful The changes of pulmonary function observed in the patients with asbestosis were those common to patients with other interstitial fibroses, and consisted of a lowered diffusing capacity together with a reduced inspiratory capacity, hyperventilation (often accompanied by arterial desaturation) on exertion, with no evidence of air-flow obstruction except in patients in whom asbestosis was complicated by asthma or emphysema Many patients also showed inequality of ventilation and ventilation-perfusion ratio These functional changes were related to an independent grading of physical signs and roentgenographic appearances Changes in lung function, specific for an interstitial fibrosis, often precede definite changes in the chest roentgenogram, so that finding them in patients with a history of exposure to asbestos is suggestive evidence of asbestosis whatever the rentgenographic appearances may be

Tidsskrift for den norske laegeforening, Oslo

80 587-632 (June 15) 1960 Partial Index

Psychotherapy of Alcoholism
R Alnaes p 592
*Polyneuritis After Severe Weight Loss
A Støren p 594
Vesico-Vaginal and Urethro-Vaginal Fistula
J Flottorp and S Iversen p 597
Medullary Sponge Kidney
I Lønnum and K F Hansen p 599

Polyneuritis After Severe Weight Loss—The histories of 2 women are reported Both of the women experienced severe weight loss in the course of disorders accompanied by severe vomiting and icterus One of the women lost 55 kg (121 lb) in a period of 5 months and the other lost 14 5 kg (32 lb) within 1 month Both patients had paresis of the lower extremities with some painfulness and reduction of sensitivity, there was also weakening of the patellar and Achilles tendon reflexes In the first woman bilateral drop-foot developed, but no psychological disturbances appeared The psy[illegible] on[illegible] the disturbances in the 2nd, chiefly depression alterna[illegible]eutic [illegible]th euphoria, was diagnosed as symptomatic psych[illegible]d more [illegible] organic basis In both patients the weight loss [illegible]ization of [illegible]nant feature in a complex of causal factors [illegible]ured by the [illegible]e B-hypovitaminosis It is suggested that [illegible]ies is largely [illegible]amin B (thiamine, nicotinamide, pyridoxine) [illegible]centration in [illegible] of the polyneuritis in these 2 women B [illegible]hy[illegible]e changes [illegible] must be kept in mind as a possible cause [illegible]whe[illegible] coagulation[illegible]tis is accompanied by anorexia, gastro-[illegible]intes[illegible]na It is sug[illegible]nces, loss of weight, liver dysfunction, [illegible]ong-[illegible]d that the [illegible]r, pregnancy, hyperthyroidism, parenteral [illegible]fusi[illegible]at at a time [illegible]g-term oral administration of antibiotics, [illegible]s the low produc[illegible] several of these factors coexist